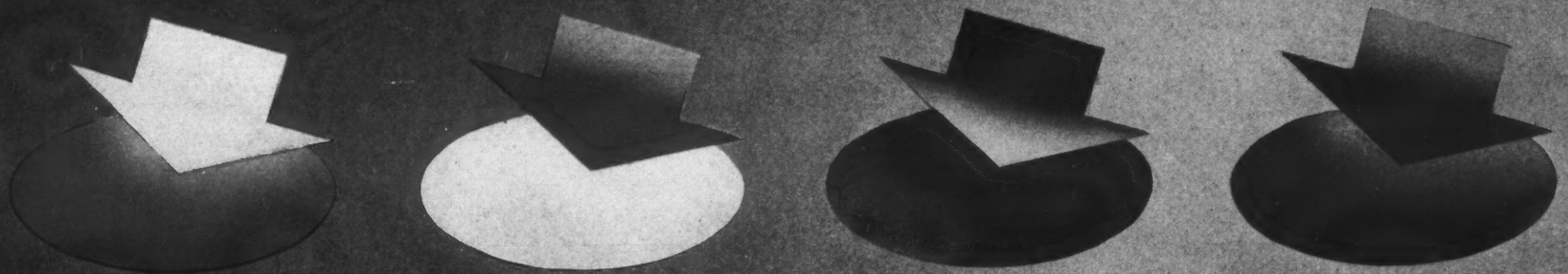
THE DENTAL Digest

DECEMBER 1945

BUY
VICTORY
BONDS



USE THE YELLOW TO SEE THE RED • USE THE RED TO SEE THE YELLOW • USE THE LIGHT TO SEE THE DARK • USE THE DARK TO SEE THE LIGHT

The variation of color and intensity of color in human teeth is so slight that even the trained eye can experience difficulty in color matching.

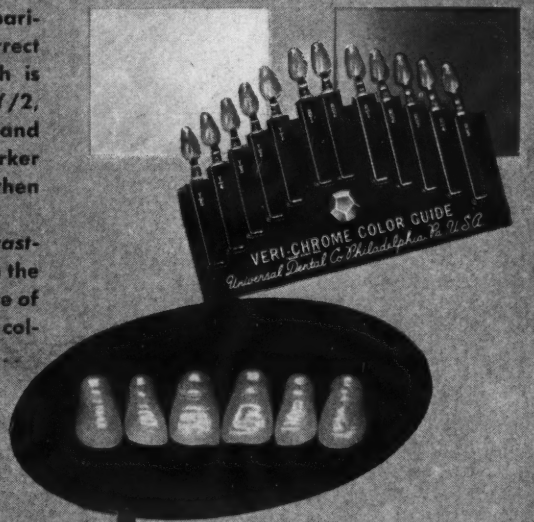
The Veri-chrome Color System simplifies this problem by a very sensible arrangement of tooth colors. On the Color Guide, the dominantly yellow tooth colors are arranged progressively by intensity of saturation and so identified by numbers from 1 to 3. The red series is segregated in the same manner.

Through this arrangement, it is possible to select tooth colors by the quick and easy method of contrast-comparison built-in the Veri-chrome Color System . . . and to do it expertly!

For example: If the natural tooth appears "yellow," compare it with one of the "red" series. If the tooth is yellow it will appear more intense by contrast. If the natural tooth is tinged with red, no contrast will be shown. If the natural tooth appears to be yellow by contrast-comparison, your judgment is correct.

When the basic color is determined, the next step is the selection of the correct saturation. Here again, we use the contrast-comparison method. To determine correct saturation: If the natural tooth is judged to be comparable to Y/2, check it with Guide teeth Y/1 and Y/3. If the natural tooth is darker than Y/1 and lighter than Y/3, then Y/2 is the correct selection.

Tooth color selection by *contrast-comparison* is possible only with the Veri-chrome Color Guide because of its systematic arrangement of colors in progressive saturations . . . and controlled color brilliance as found in natural teeth.



THE SATURATIONS OF THE DIAGRAMMATIC ILLUSTRATIONS ARE INTENSIFIED FOR EASIER PERCEPTION. THEY DEMONSTRATE THE PRINCIPLES INVOLVED IN THE CONTRAST-COMPARISON SYSTEM OF TOOTH COLOR SELECTION.

Veri-chrome

tooth colors now available in

FIVE-PHASE ANTERIORS DR. FRENCH'S POSTERIORS *(new carvings)*
NUFORM ANTERIORS AND POSTERIORS

UNIVERSAL DENTAL COMPANY • 46TH at BROWN STREET • PHILA 39, PA

FIVE-PHASE ANTERIORS DR. FRENCH'S POSTERIORS (new carvings)
NUTORS ANTERIORS AND POSTERIORS
- PHILA. 39, PA

WILLIAMS
"Klondiker"
HARD INLAY GOLD WITH INDIUM

For accurate, enduring restorations . . . . . .

The metallurgical properties of Williams "Klondiker" were developed to meet your ideas of the perfect hard inlay gold! Casts to a dense, sharp-margined inlay with precision fit. Beautiful rich gold color. Complies with A. D. A. Specification No. 5, Type C.

WILLIAMS GOLD REFINING CO., Inc.
BUFFALO 14, N. Y. • FORT ERIE N., ONT. • HAVANA, CUBA

Vol. 51, No. 12. Monthly. Dental Digest, Inc., 1005 Liberty Ave., Pittsburgh, Pa. Subscription $3.00 a year, U. S.
Entered as second-class matter at the post office at Pittsburgh, Pa. under the act of March 3, 1879.

No Guesswork

WHEN REPROCESSING ILL-FITTING DENTURES!

For years many dentists have made unsuccessful attempts to reprocess ill-fitting dentures. Their failures were due to the use of quick setting materials that did not possess the proper qualities.

Konformax Rebase is perfect for reprocessing. It is easy flowing, sets slowly and does not displace tissue.

Comfort, occlusion and retention are determined with denture in function for 24 hours (at least) or a much longer period. High spots and over-extended areas are easily discernible and can be relieved. If necessary, more Konformax Rebase may be added where indicated.

Most important, you continue the test until you have the patient's assurance that the denture is satisfactory in every way. Then you need not be apprehensive about the fit of the denture when you send it to your technician.

KONFORMAX DIVISION,
PERMATEX COMPANY, INC.
Brooklyn 29, N. Y., U. S. A.

REBASE

MADE BY **KONFORMAX**

THE DENTAL Digest

VOL. 51 NO. 12

December 1945

Control of Mandibular Roentgenograms by Fixed Positioning, *Leonard Frank*..... 680

A Flexible Rest in the Removable Partial Denture, *Virgilio Moojen de Oliveira, D.D.S., M.D.*..... 685

Correction of Extreme Protrusion of the Maxilla and Atrophy of the Left Mandible..... 686
S. L. Quitt, D.D.S.

Early Removal of Third Molars for Caries Prevention, *Julious R. Bourgoyne, D.D.S.*..... 689

Announcement of Books Received..... 693

Peripheral Seal Impression Technique, Using the Alginates, *Alan A. Axelband, D.D.S.*..... 694

The Nerve Distribution and the Blood Supply of the Head from the Frontal View..... 696

Clinical and Laboratory Suggestions..... 698

1. A Method of Removing Broken Root Fragments. 2. Reinforcement for the Acrylic Crown. 3. Keeping the Tooth Moist During Operative Procedures. 4. A Matrix Band Cut on the Bias. 5. A Method of Making Small Roentgenograms. 6. Partial Denture Repairs. 7. A Shock-Proof Malleting Instrument. 8. Duplication in Immediate Dentures. 9. An Acrylic-Processing Unit. 10. Additional Protection for the Operating Gown. 11. A Close-Fitting Copper Band for Indirect Impressions. 12. Uses for Sterile Wicking.

The Editor's Page..... 697 Contra-Angles..... 716

Annual Index..... 702

EDWARD J. RYAN, B.S., D.D.S., *Editor*
ETHEL H. DAVIS, A.B., *Assistant Editor*
In Military Service
RUTH K. BARNHART, *Assistant Editor*
708 Church Street, Evanston, Illinois

About Our CONTRIBUTORS

LEONARD FRANK, roentgenologist, has written for us previously, both independently and in collaboration with Doctor William A. Colborn of San Francisco. In this issue Mr. Frank presents suggestions for the CONTROL OF MANDIBULAR ROENTGENOGRAMS BY FIXED POSITIONING.

VIRGILIO MOOJEN DE OLIVEIRA (D.D.S., 1925; M. D., 1937, University of Brazil) limits his practice to prosthodontia. Doctor Oliveira is professor of prosthesis in the National Dental School of the University of Brazil, and is president of the Dental Association of Brazil. He has published numerous articles in the dental literature. His article here describes a technique for the construction of a flexible rest for a removable partial denture.

SOLOMON LOUIS QUITT, D.D.S. (University of Maryland, College of Dentistry, 1914) is a general practitioner. Doctor Quitt reports a case of CORRECTION OF EXTREME PROTRUSION OF THE MAXILLA AND ATROPHY OF THE LEFT MANDIBLE by surgery and prosthodontia.

ALAN A. AXELBAND (B.A., College of the City of New York, 1928; D.D.S., New York College of Dentistry, 1933) is in general practice. Doctor Axelband has published several articles on denture techniques. He presents here a PERIPHERAL SEAL IMPRESSION TECHNIQUE, USING THE ALGINATES.

JULIOUS ROY BOURGOYNE (B.S., University of Texas, 1936; D.D.S., Loyola University, School of Dentistry, 1941) is assistant professor of oral medicine and surgery at the University of Tennessee, College of Dentistry. Doctor Bourgoyne advocates the early removal of the third molars to help prevent caries.

Copyright, 1945, Dental Digest, Inc. See page 676 for Subscription Data, etc. The magazine is mailed on the fifteenth of the month of issue.

Control of Mandibular Roentgenograms by Fixed Positioning

LEONARD FRANK, San Francisco

Suggestions are offered for taking accurate roentgenograms of the mandible, and a technique is suggested which makes possible the duplication of any result and the correction of any errors.

THERE ARE times when an accurate roentgenogram of the mandible is almost mandatory. Fractures of the condyle, the posterior border of the ascending ramus without superimposition of the spine, fractures through the angle of the mandible, and fractures in the region of the cuspid, are some of the pathologic conditions to be roentgenographed. There seems to be a great deal of difficulty in determining how to position the head and what angle to use. The technique described here is offered in an effort to eliminate the difficulties encountered in taking roentgenograms of the mandible.

When it is necessary to take one of these roentgenograms, the general procedure oftentimes is to place the head on a film, grope around for an angle, and hope for the best. Sometimes the resultant roentgenograms are excellent, and at other times the roentgenograms range from good to bad or worthless. When a duplication of the "perfect picture" is attempted, the angle cannot be remembered. It is this hit-and-miss technique that defeats the purpose of good roentgenograms.

Suggestions for Accuracy

To eliminate guesswork in taking mandibular roentgenograms it is necessary to set up a technique with known factors that makes it possible to duplicate any result and to be able to correct mistakes. This can be done without too much effort, as is depicted in the illustrations.

1. Follow the rules. If a roentgenogram is taken and exactly what is wanted does not come into the relief, you *know* what correction to make because you *know* what you did in taking the first picture.

2. Do not expect to become expert on taking the first exposure. Take enough time to make the "setup" of film, patient, tube, and angle. Be sure

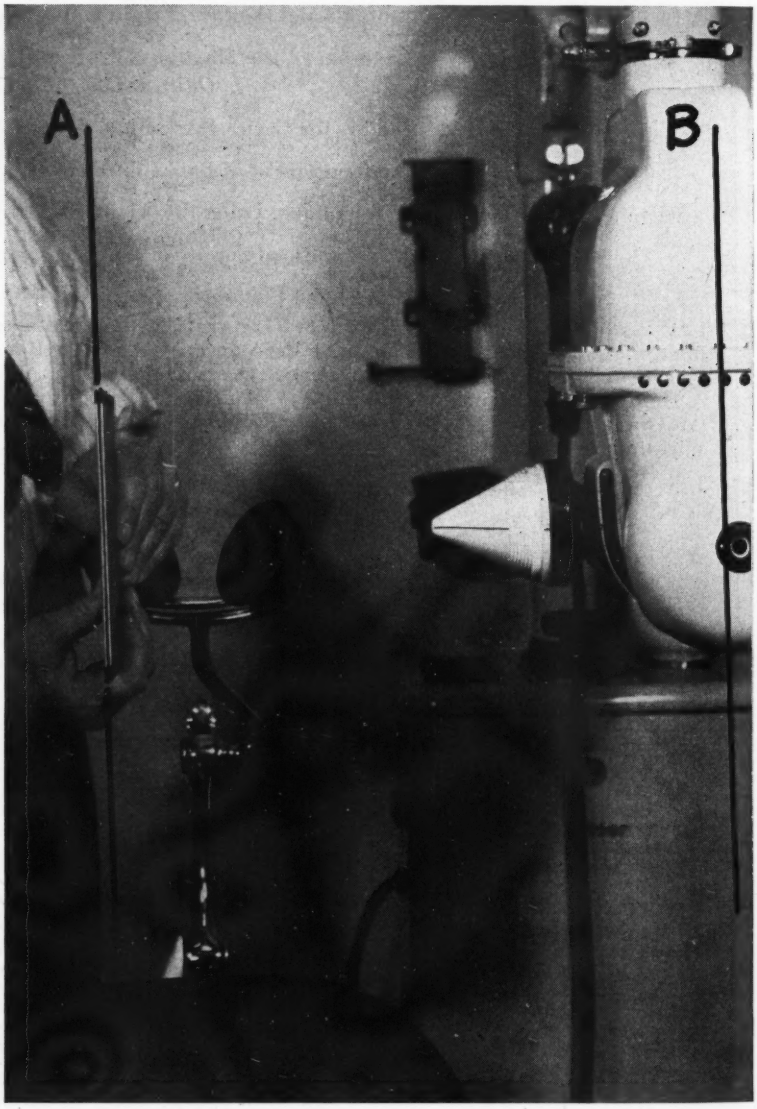


Fig. 1A

each is in correct relation to the other. Do not rush this procedure.

3. Do not become discouraged if the first few roentgenograms do not turn out as expected. Keep at it. Your skill will increase with each try.

Technique

1. Figures 1A and 1B show the relationship of the film to the tube. This relationship must not be changed. The tube and the film must be parallel to each other in all directions at all times with all patients. It is the knowledge of this fixed position that makes it possible to control the results.

2. Figure 2A shows the head in

Figs. 1A *and* 1B—*Relationship of film* (A) *to tube* (B) : *The film and tube must be parallel with each other in all directions.*

Fig. 2A (*bottom left*)—*The head* (B) *must be parallel with the film* (A) *and the tube* (C) *in all directions.*

Fig. 2B (*bottom right*)—*In the lateral aspect, the lower border of the mandible* (A) *must be parallel with the lower border of the film* (B).

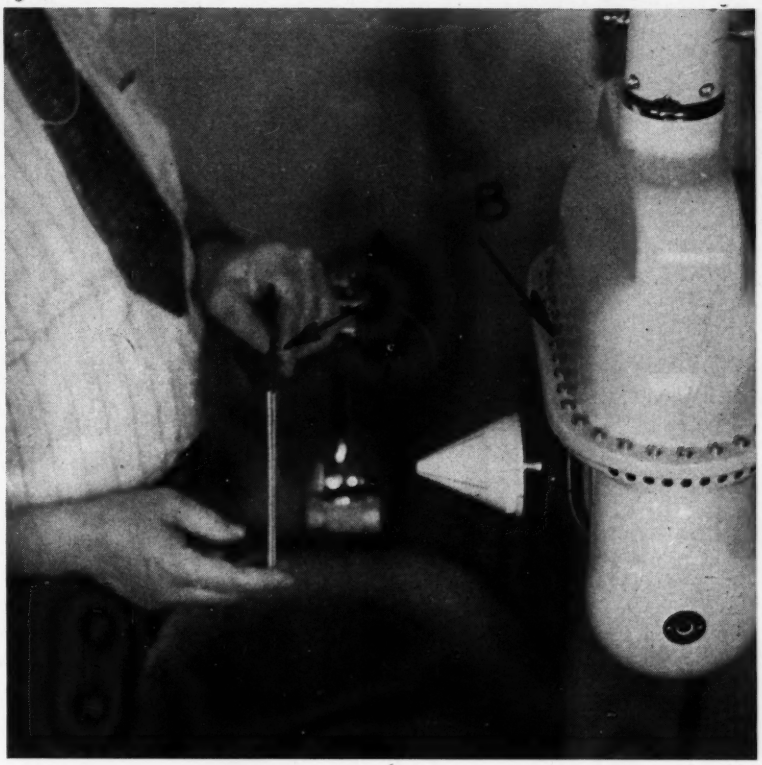
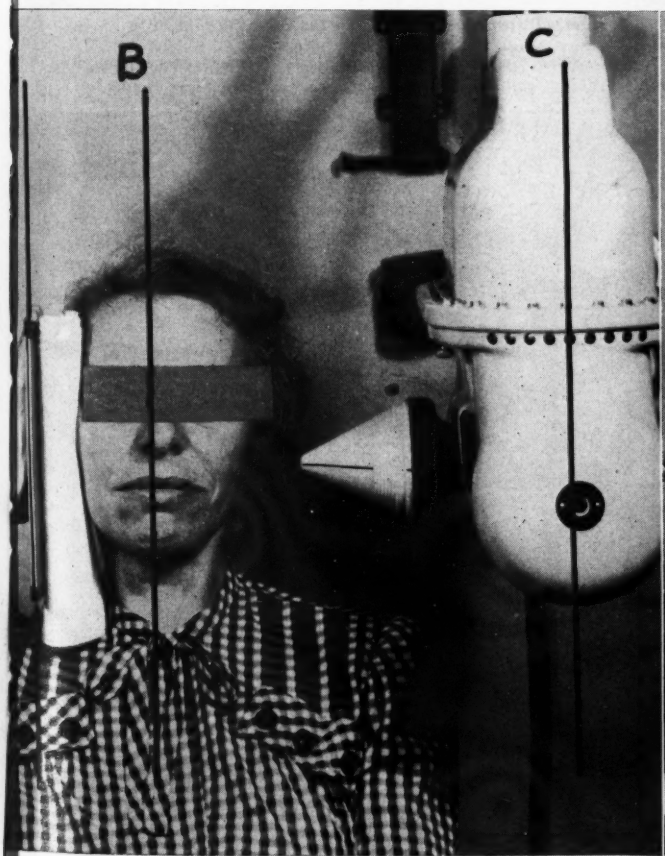


Fig. 1B



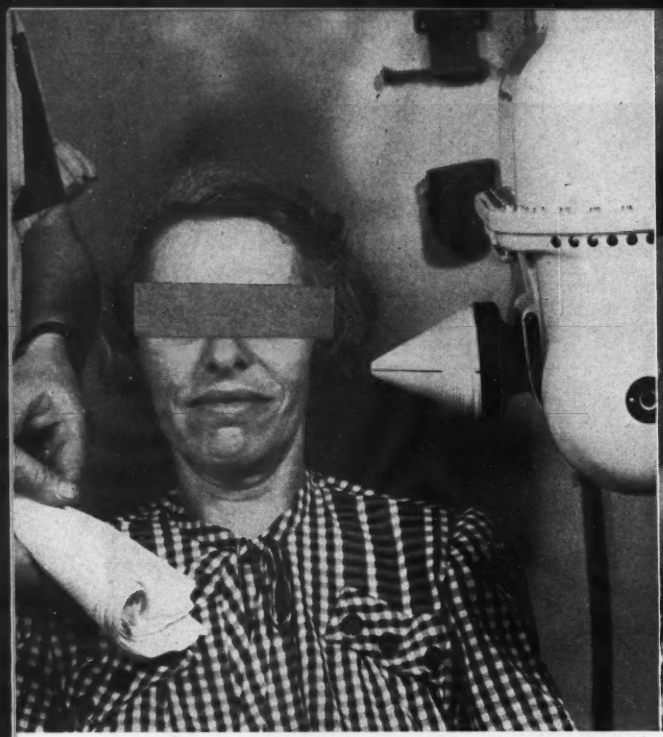
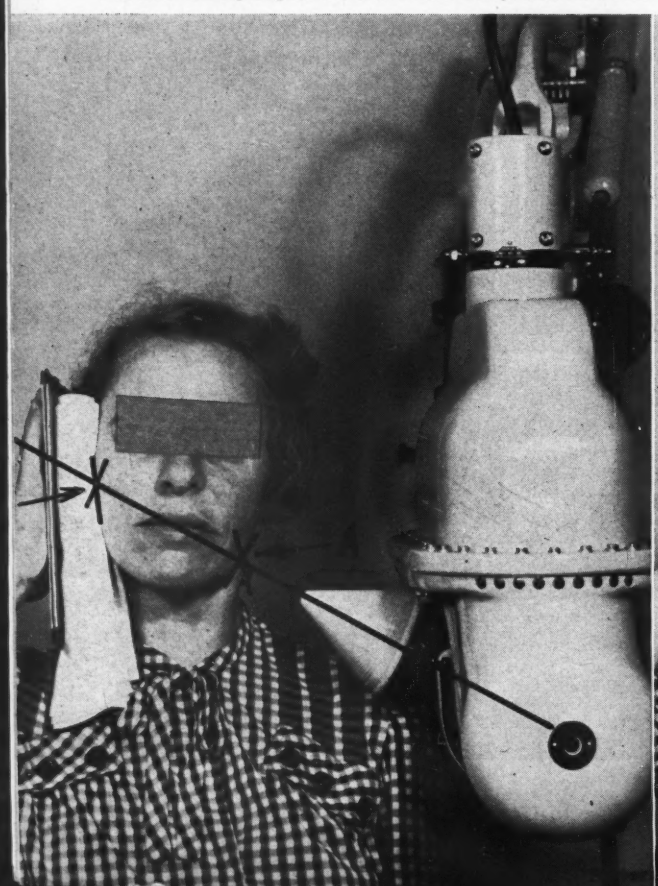


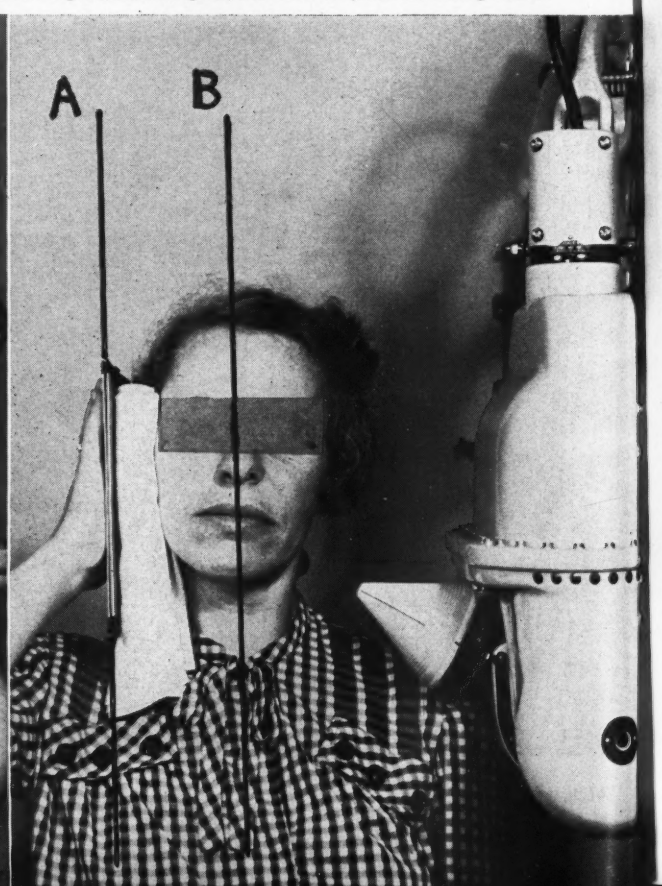
Fig. 3 (left)—To keep the head parallel with the film and tube, roll a towel into a long cylinder.

Fig. 4 (right)—Place the towel between the head and the film, moving it into a position that will bring the head parallel with the film and the tube. Have the patient press lightly on the film to hold it in place.

Fig. 5 (left)—Keeping all planes parallel, lower the tube and point the cone upward so that the central ray enters at a point just below the lower border of the mandible (A) *and emerges at the external opening of the ear on the opposite side* (B).

Fig. 6 (right)—Changing the relationship of lines A and B will control the part of the mandible to be roentgenographed. The resultant roentgenogram will show the condyle, the third molar region, and the posterior border of the ascending ramus.





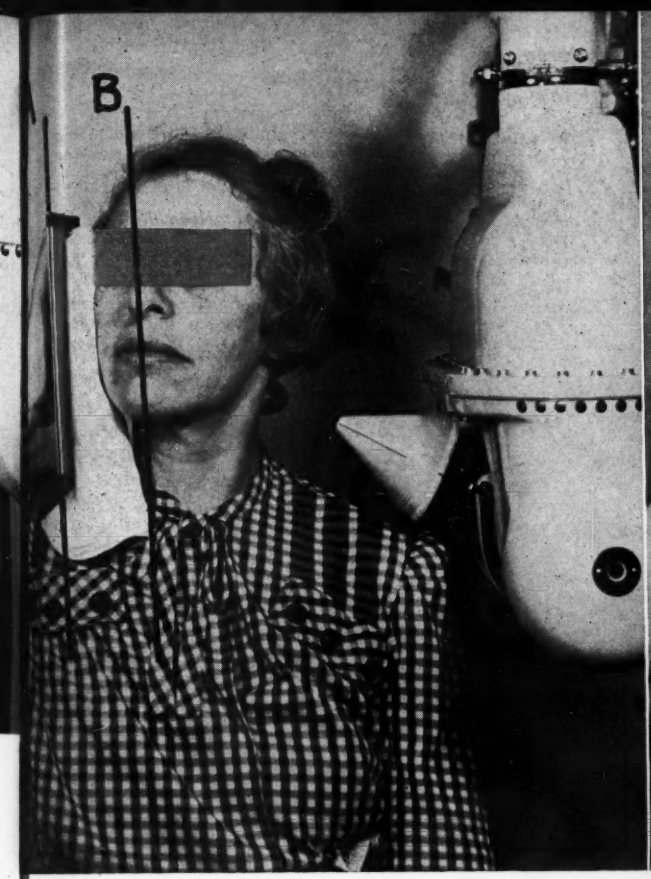


Fig. 7 (left)—The roentgenogram resulting from this positioning will show the middle region of the mandible.
Fig. 8 (right)—The roentgenogram resulting from this positioning will show the anterior region of the mandible.

position to be roentgenographed, and its relation to the film and the tube. A line drawn through the center of the face must be parallel to the film and the tube. From the lateral aspect (Fig. 2B) the lower border of the mandible must be parallel to the lower border of the film. These fixed positions must be the same at all times with all patients, for again it is the knowledge of these fixed positions that permits control of the results.

3. Figure 3 shows how a towel is rolled up to form a long cylinder, and is then placed between the face and the film (Fig. 4). This not only will facilitate getting the film into a parallel position with the tube but also will help to steady the film. The patient can hold the film in place easily by pressing lightly on it.

4. The technique for finding the correct angle is illustrated in Figure 5. Keeping all described planes parallel, the tube is lowered so that when the cone is pointed upward the central ray enters at a point just below the lower border of the mandible and emerges at the external opening of the ear on the opposite side (at points A and B). If there is a superimposition of one mandible on the other, it is because the central ray entered at a point above the lower border of the mandible, thereby shortening the angle too much. If

Fig. 9—Fracture of condyle. Roentgenogram taken in position shown in Figure 6.

Fig. 10 (*top*)—*Impacted third molar and cyst. Roentgenogram taken in position shown in Figure* 6.

Fig. 11 (*center*)—*Fracture through the body of the mandible. Roentgenogram taken in position shown in Figure* 7.

Fig 12 (*bottom*)—*Fracture through the mental foramen between the bicuspids. Roentgenogram taken in position shown in Figure* 8.

there is a distortion, it is because the central ray entered at a point too far below the lower border of the mandible, thereby lengthening the angle too much. It is of utmost importance, in getting the correct angle, that the central ray enters just below the lower border of the mandible.

5. Figures 7 and 8 demonstrate the control of the part of the mandible to be roentgenographed. Thus far all positions have been fixed.

6. The part of the mandible to be roentgenographed is controlled by the relationship of line B to line A. Line B is the only line that is not fixed. The farther away line B is from line A, the more posterior will be the region shown.

7. The distance between line A and line B is changed by rotating the head. Keeping the central line of the faee, line B, parallel to the tube and the film (Fig. 2A, lines A and C), the head is rotated so that line B comes closer or moves farther away from line A, depending on what part of the mandible is to be roentgenographed. Thus by varying the relationship of lines A and B any errors can be corrected, any part of the mandible can be shown, and any position can be duplicated.

8. The roentgenograms pictured in Figures 9 through 12 were taken with the use of a cardboard holder and "No Screen" films. Exposure time was four seconds and developing time was five minutes at 68 degrees. The exposure time will vary according to the distance of the tube from the film but in most cases not more than five seconds will be necessary. Films in cardboard holders were used because they give a sharper picture than those taken in a cassette with double screens.

450 *Sutter Street.*

A Flexible Rest in the Removable Partial Denture

VIRGILIO MOOJEN de OLIVEIRA, D.D.S., M.D., Rio de Janeiro, Brazil

A technique is described for the construction of a flexible rest for a removable partial denture. The technique involves the extension of the horizontal part of the lug from the clasp to increase the flexibility.

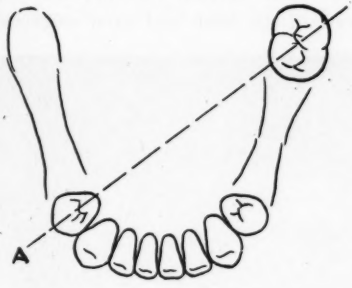
A FLEXIBLE rest is indispensable in the removable partial denture in which teeth are missing on one or both sides of the arch (Fig. 1), and in which it is necessary for the appliance to rest partly on the teeth and partly on the mucosa.

Technique

The most practical method of obtaining such a flexible rest is to extend the horizontal part of the lug from the clasp, as is shown in Figure 2. The longer the horizontal part of the lug, the more flexibility there will be. The length of this horizontal part of the lug must not be exaggerated, however, but should be sufficient to compensate for the compression of the soft tissues during mastication. In a bilateral partial denture, the flexible rest is used where the base is borne by the mucosa. Where the base is tooth-borne, no flexible rest is indicated. For example, in Figure 3 there is no flexibility at the molar clasp, A, and a moderate amount at B; but at C, on the tissue-borne saddle, the flexible rest is used. In such cases in which teeth are missing on both sides of the arch, the flexibility should be distributed equally on both sides (Fig. 4).

The only difficulty of a technical nature encountered in making this type of clasp is in keeping the flexible lug away from the saddle during the casting process. This can be done by placing a small piece of mica between the lug and the saddle after the case has been waxed and is ready for investing (Fig. 5).

Avenida Rio Branco 311-6.



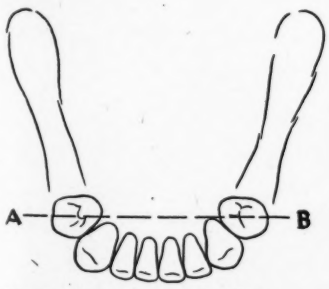


Fig. 1—Cases in which all the posterior teeth are missing on one side (above) or on both sides (below) of the arch necessitate resting the appliance partly on the mucosa and partly on the teeth, which produces leverage around the axis, AB, with resultant damage to the abutment teeth and lack of stability.

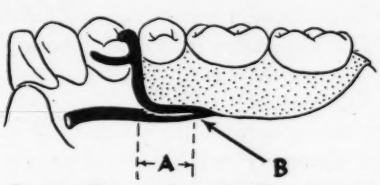


Fig. 2—Clasp with a flexible rest, the horizontal part of the lug being extended (A) to permit sufficient flexibility around its juncture (B) with the saddle to compensate for the displacement produced by the compression of the mucosa.

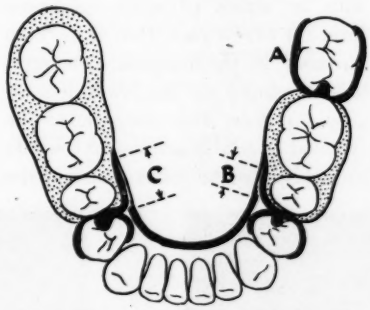


Fig. 3—Treatment of case shown in Figure 1 (above), with the flexible rest on one side only: There must be no flexibility in (A), a moderate amount in (B), and a greater amount in (C). The flexibility is obtained by changing the length of the horizontal part of the lug.

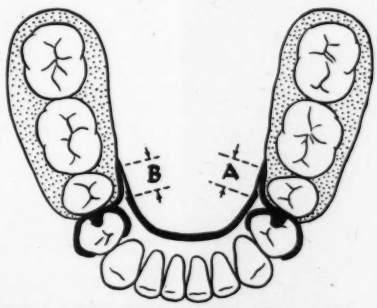


Fig. 4—Treatment of case shown in Figure 1 (below), with the flexible rest on both sides: The flexibility must be equal on both sides, which is obtained by making the horizontal parts (A and B) of the lugs the same length.

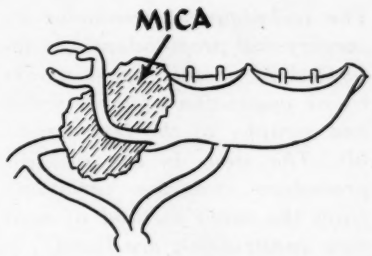


Fig. 5—To keep the horizontal part of the clasp free during the casting process, place a small piece of mica between the saddle and the lug.

Correction of Extreme Protrusion of the Maxilla and Atrophy of the Left Mandible

S. L. QUITT, D.D.S., Greenwich, Connecticut

The technique of treatment by surgery and prosthodontia is described in a case report of extreme protrusion of the maxilla and atrophy of the left mandible. The steps in the surgical procedure and the variations from the usual method of denture construction are listed.

History

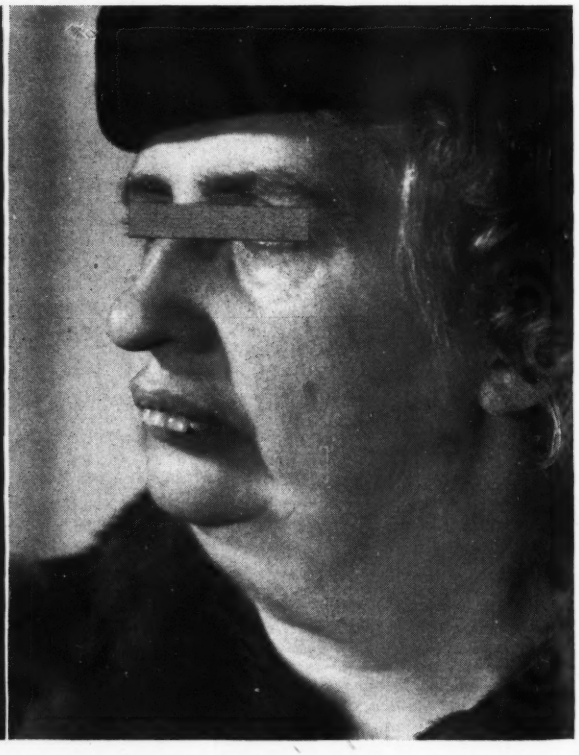
THE PATIENT, a woman aged 50, was referred to me for dental restorations. She complained of continual pain in the upper teeth and gingivae, especially on contact of the lower teeth with the lingual mucosa during mastication.

Although the medical history remains vague, I was able to obtain the following rather inadequate information: At the age of five, the patient had general septicemia. The infection originated in the mouth, causing a temporary ankylosis of the right temporomandibular articulation. There was a scar on the right side of the jaw, indicating surgical treatment at that time. Further questioning elicited the information that the patient had been confined in a hospital with an attack of acute rheumatic fever for over a year. During her confinement in the hospital, osteomyelitis developed in the lower left bicuspid region. This necessitated the removal of a large sequestrum, which probably was the direct cause of the present mandibular atrophy and facial deformity.

The patient was extremely nervous and sensitive. Because of her abnormal appearance, she had refused to be photographed and rarely accepted social invitations. When in public, she tried to cover her mouth with her hand.

Examination

There was an extreme protrusion of the upper jaw and atrophy of the left side of the mandible (Figs. 1 and 2). The upper centrals and laterals, and the lower right cuspid and third molar, and left cuspid, first bicuspid, and third molar, were present. The rest of the teeth had been extracted



Figs. 1 and 2—Front and left profile views of the patient before treatment. Note the extreme protrusion of the maxilla and the depression of the left mandible.

Fig. 3—Left profile view of the articulated study models.

Fig. 4—Appearance of the patient with the dentures in centric.

over a period of years. All the teeth were extremely loose, almost ready to be exfoliated. There was profuse gingival bleeding and definite hypertrophy of the mucosa on both the labial and lingual surfaces. The left tuberosity was soft and flabby.

Roentgenographic examination disclosed progressive periodontoclasia of all the remaining teeth except the lower third molars which appeared normal.

Surgical Treatment

1. Articulated study models were made of the patient's teeth before treatment (Fig. 3).

2. The upper anterior teeth were extracted and an extensive alveolectomy performed.

3. A vertical incision was made on both sides of the cuspid areas.

Fig. 5—Front view of the patient smiling with the dentures in position. The patient still tends to move the jaw to the right.

Fig. 6—Left profile view of the patient smiling with the dentures in position.

Fig. 7—Appearance of the patient with the dentures in position, showing an almost normal proximal relationship of the lips. (See Figure 3.)

4. A mucoperiosteal flap was raised, and by the aid of rongeurs, a bone file, and surgical burs, the alveolar processes were trimmed extensively on both the buccal and lingual sides to bring about a closer relationship with the mandibular ridge.

5. The hypertrophic tissue was excised, and the edges approximated and closed with a blanket suture, using novodermic number 000.

6. The same procedure was carried out on the lower jaw to correct the ragged edges, undercuts, and uneven appearance of the lower ridge.

7. Healing was uneventful, and the sutures were removed on the fifth day. There was an immediate improvement in the patient's appearance as a result of the correction of the protrusion, which brought the lips into an almost normal proximal relationship.

Restorations

1. An impression of the upper jaw was obtained with modeling compound and plastogum, and of the lower jaw with colloid impression material.

2. Casts were made in castone.

3. Baseplates with bite blocks were constructed, and an attempt was made to establish proper vertical dimension. Several attempts had to be made to obtain the correct bite, the patient having had a tendency to throw her jaw laterally toward the right.

4. The setups were tested for proper occlusion, and the lower case was plumped to correct the depression on the left side.

5. Two acrylic dentures were constructed, the lower carrying two molar clasps for additional retention (Figs. 4 through 7).

6. The patient has worn the dentures for two months, and has become accustomed to using them continually. She has shown a definite physical improvement, which in turn has given her a much happier mental attitude.

73 *Greenwich Avenue.*

DENTAL MEETING

Dates

The Delaware State Dental Society, annual meeting, Academy of Medicine, Wilmington, January 9.

•

The Rhode Island Dental Society, annual meeting, Narragansett Hotel, Providence, January 22-23.

•

The Washington State Dental Society, annual meeting, Olympic Hotel, Seattle, January 31-February 2.

•

The Greater Philadelphia annual meeting, Bellevue Stratford Hotel, Philadelphia, February 5-7.

•

Chicago Dental Society, midwinter meeting, Hotel Stevens, Chicago, February 11-14.

•

Dental Society of the State of New York, seventy-eighth annual meeting, Hotel Pennsylvania, New York City, March 13-16.

•

The Thomas P. Hinman midwinter clinic, thirty-third annual meeting, Atlanta City Auditorium, Atlanta, Georgia, March 24-27.

•

Pennsylvania State Dental Society, annual meeting, May 7-9.

Early Removal of Third Molars for Caries Prevention

JULIOUS R. BOURGOYNE, D.D.S., Memphis, Tennessee

The numerous theories and experiments on caries control and prevention are reviewed for comparison of the results. Early removal of third molars, before the roots are completely formed, is advocated because these teeth serve no essential purpose and often are the cause of harmful complications.

THIS ARTICLE has been written to help promote the theory that the early removal of third molars, that is, before the roots are fully formed or at the approximate age of twelve years for the lower and fifteen years for the upper, will prevent, or at least retard, some dental caries. This is not to be interpreted to mean that all interproximal caries is caused by impacted or crowded teeth.

The subject of caries has been the object of concentrated study for some time. The use of fluorides for caries prevention is, at present, in the limelight. Judging from all reports, rapid strides are being made with this medicament, but, like all other methods, it is only an aid to prevention. Studies of other methods of treatment and prevention have been and still are being made: organotherapy,[1] dietary control,[2] extirpation of salivary glands of rats,[3] food particle size,[4] calcium and vitamin D deficiencies,[5] mineral salts,[6] bacteriologic studies,[7] and many local factors. All these methods have been studied intensively and are still under observation, as are other new approaches to the problem. As yet, no one factor has been pointed out to be the sole cause of caries, nor has a definite, infallible method of prevention been discovered. It is reasonable to assume, therefore, that the measures to be used in combatting this disease successfully should consist of a compilation of the few advances that have been made.

Some research men have attempted, without success, to disprove the local factor as a cause by presenting evidence of bilateral symmetrical caries which so often is seen in the mouth. Coinciding with the beliefs of many of our authorities, the statement may be safely made that the local factor, whether it be mechanical or chemical, is a major one in dental caries.

[1]Bodecker, C. F., and Thomas, B. O. A.: Results of Organotherapy in the Treatment of Dental Caries, D. Items Interest **64**:1034-1051 (November) 1942.
[2]Boyd, J. D.: Dietary Control of Enamel Caries, J.A.D.A. **30**:1344-1351 (September) 1943. Elliott, M. D.: Reduction of Dental Caries by Dietary Supplement, Massachusetts D. Soc. Bul. **17**:4-9 (March) 1941.
[3]Cheyne, V. D.: A Description of the Salivary Glands in the Rat and a Procedure of their Extirpation, J. D. Research **18**:457-468 (October) 1939.
[4]Klein, Henry, and McCollum, E. V.: The Significance of Food-Particle Size in the Etiology of Macroscopic Dental Decay in Rats, J. D. Research **13**:69-71, 1933.
[5]Rosebury, Theodor, and Foley, Genevieve: Studies in the Rat of Susceptibility to Dental Caries, J. D. Research **14**:359-378, 1934.
[6]Torrens, R. G.: Dental Caries and its Control by Mineral Salts, Brit. D. J. **71**:385-387 (December 15) 1941.
[7]Speidel, T. D.; Boyd, J. D.; and Drain, C. L.: Bacteriological Studies in Dental Caries, J. D. Research **18**:185-188 (June) 1939.

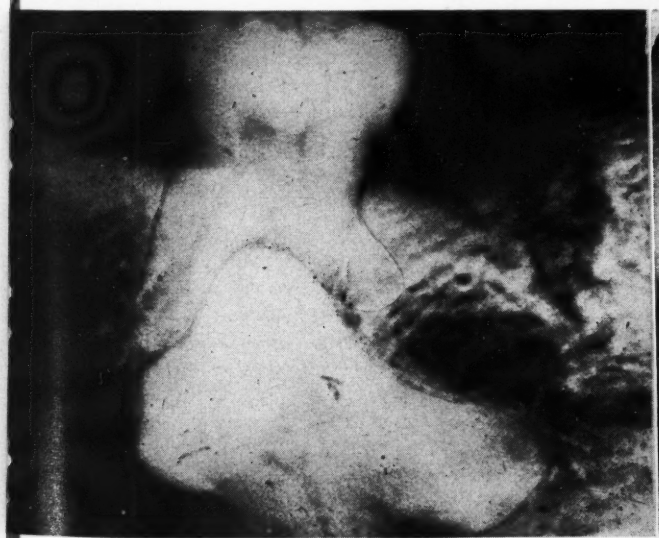


Fig. 1—Impacted lower third molar impinged between and beneath the roots of the second molar: To bring about eruption of the third molar by removal of occlusal tissue would necessitate removal of the second molar. The impacted tooth was removed buccally, and the second molar was preserved.

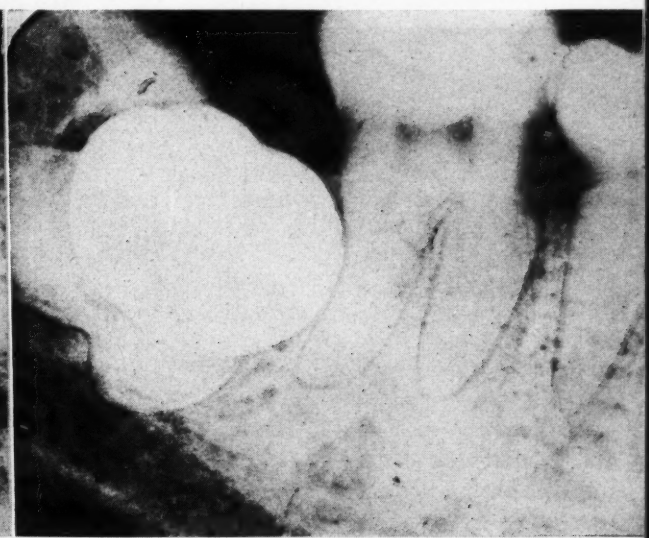


Fig. 2—Impacted lower third molar growing crosswise: Note the loss of bone distal to the second molar caused by the impaction. Eruption of such a tooth by removing the occlusal tissue is not likely.

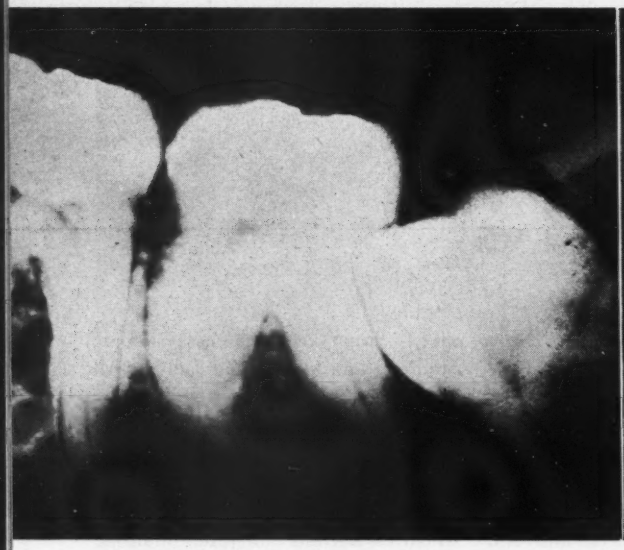


Fig. 3—Mesioangular impacted lower third molar with diverged roots: If the impacted tooth, lying under the beginning curve of the ramus, were brought upright, the tooth would become impacted distally.

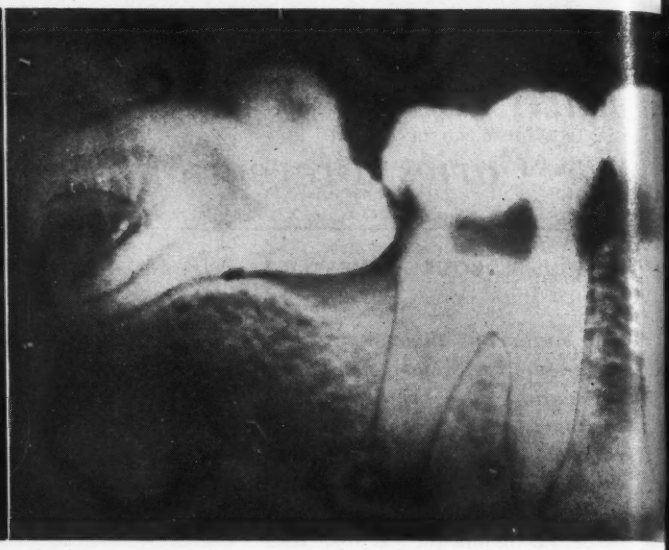


Fig. 4—Impacted lower third molar: Note the caries on the distal surface of the second molar at its contact with the impaction.

Removal of First and Second Molars

One approach to the solution of our caries problem was made by Wilkinson[8] who states that extremely few of the Anglo-Saxon race have adequate space in their mouths to accommodate thirty-two teeth without distortion in some manner. His means of prevention is to remove the first molar, regardless of its condition, between the ages of eight and nine years. Wilkinson's statistics show that about 70 per cent of the children treated in this manner are free from caries. According to him, the dental requirements of forty-eight young people five years after extraction of the first permanent molars were four small restorations.

An experiment such as that made by Wilkinson has not been under my observation, but I have noted that many young people who have had early removal of the first molars have acquired and maintained good occlusion by the mesial drift of the second and third molars completely closing the space. If it is found that the second and third molars will always drift into functional position, obtaining good contact, early loss of the first molar would not be a liability but an asset.

The late Horace Davis of Baltimore was another advocate of the re-

[8]Wilkinson, A.: Early Extraction of Six Year Molars and Prevention of Dental Caries, D. Record **62**:57 (March) 1942.

Fig. 5—Impacted upper third molar: This tooth was turned buccally in addition to its angulation. Removal of the occlusal tissue would not result in eruption of this tooth into correct position.

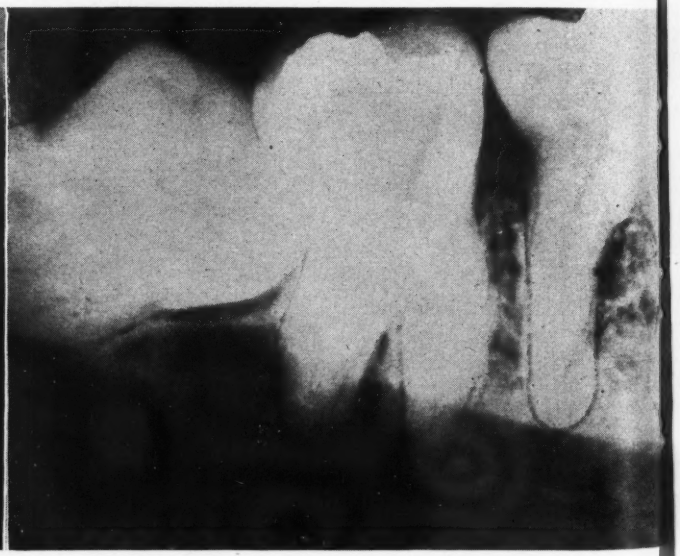


Fig. 6—Impacted lower third molar: Note the deep indentation in the second molar, and the rarefied bone distal to the crown of the impacted tooth showing present or previous infection.

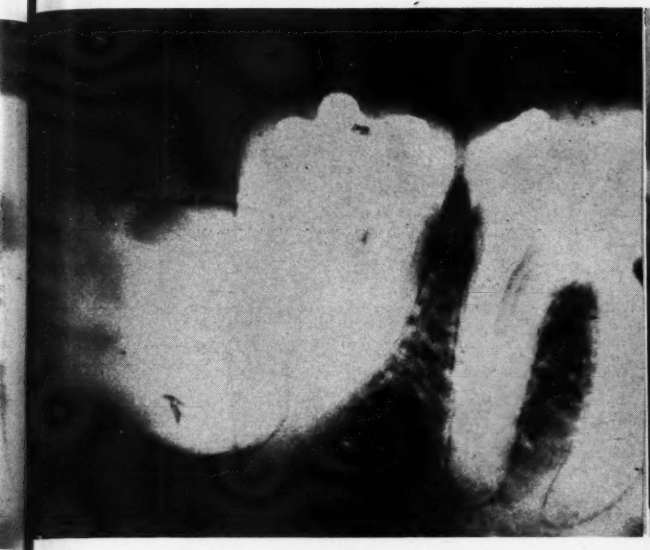


Fig. 7—Impacted lower third molar in horizontal position: It is highly improbable that such a tooth could ever be forced to erupt into correct position and become useful in any way.

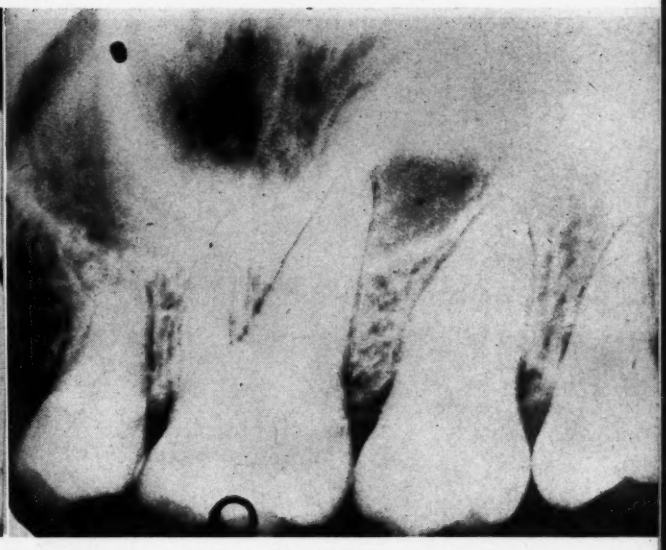


Fig. 8—Partly impacted upper third molar: Removal of the occlusal tissues may aid this type of tooth to an earlier eruption.

moval of teeth in order to acquire space to allow easy eruption. Davis advocated removal of the second molar, thus allowing the third molar to erupt freely.

Early Removal of Third Molars

Relief of the crowded arch may be obtained only by creation of more space. This may be acquired by orthodontic means in some cases, but in other instances so much extra room would be needed to allow the third molar to erupt satisfactorily that the normal or correct contours of the face would be lost. Another method of creating space, a method emphasized here, is by the extraction of teeth. Early removal of all third molars is advocated because many of them remain impacted, and also because even those that do erupt have the least value of any tooth in the mouth, causing harm in numerous instances. Some years ago Samuel Brock and Howard Miller advocated removal of all third molars before root formation. Andresen and Haupl[9] advocate what they term a "germotomy" of the third molar at the age of ten or eleven years. They, therefore, recommend the removal of the third molar at even an earlier date than I do. Andresen and Haupl arrived at their conclusion after much experimentation. They state that regardless of how straight the teeth are after orthodontic treatment, the treatment should not be considered terminated without first eliminating the pressure of the third molars.

Edward H. Toler[10] states that the ability of the third molar to cause malocclusion by pressure is overlooked too often by the general practitioner. He also cites a case history of one of his patients and tells of the buckling of teeth in the arches due to impacted third molars. The intruding teeth were removed and correct alinement was obtained by orthodontics. It is Toler's opinion that this condition of the crowded arch and malocclusion would not have occurred if the third molars had been extracted before the roots were formed. Toler also concludes that the familiar flap of posterior bounding tissue is an incubating zone for Vincent's disease. I readily agree with the opinions and statements of Toler. The third molar is a menace, and the greater majority of those which are erupted sufficiently to serve as anchors for clasps are not stable enough to bear the stresses of a partial denture.

There is also a question of pressure on the nerves and vessels caused by impacted teeth. There can be no doubt that this pressure causes damaging effects. This is shown by actual case histories, some of which I now have on record. Return of sight to patients who have been blind for years, and the relief of pain, have been given with no other treatment except the removal of impacted teeth.

Philip Gross of Philadelphia writes his approval of early removal of third molars, one of his reasons being that great difficulty is encountered, in many cases by both the operator and the patient, in removing the tooth when it is fully developed and, perhaps, in an awkward position.

William Durbeck[11] makes the following statement concerning a recent article of mine:[12] "That his statements are within the realm of possibility is self-evident. His theory can definitely be proved as an established fact only by a group of competent investigators with adequate research facilities. Surely his ideas comprise an interesting challenge to the dental profession." Durbeck feels, however, that in some cases the growth centers of the jaws may be involved and wishes more proof before accepting this treatment wholeheartedly.

It is my opinion that such extensive surgery as that which would involve the growth centers, if these are

[9]Andresen, Viggo, and Haupl, Karl: Functional Orthodontic Therapy, Leipzig, Herman Meusser, 1936.
[10]Toler, E. H.: The Third Molar is a Menace. J. Pierre Fauchard Acad. (December) 1943.
[11]Durbeck, W. E.: The Impacted Lower Third Molar. First Edition, Brooklyn, Dental Items of Interest Pub. Co., 1943.
[12]Bourgoyne, J. R.: Early Removal of Third Molars to Prevent Caries, THE DENTAL DIGEST 50:108-110 (March) 1944.

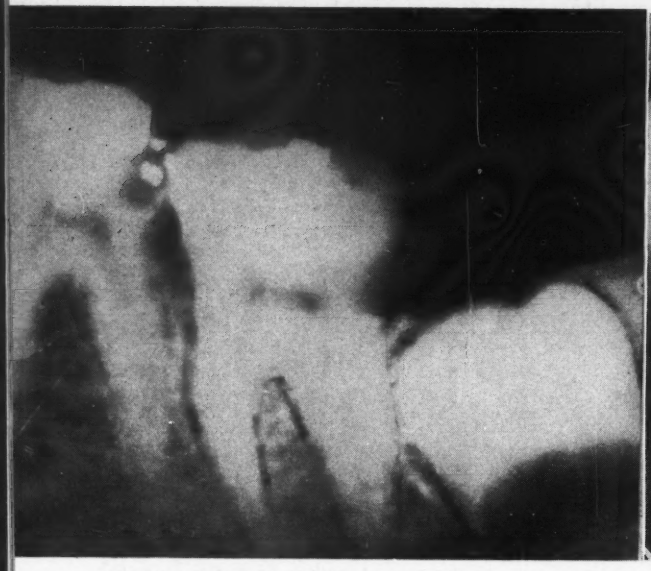


Fig. 9—Impacted lower third molar: Removal of the occlusal tissue may aid this tooth to an earlier eruption. The crown, even at this early stage of development, however, has prevented the second molar from completing its eruption, thus causing caries of the first molar at the contact points.

Fig. 10—Roentgenogram showing the approximate age for removal of the lower third molar: The second deciduous molar is seen on the verge of expulsion. The second permanent molar has erupted, but has not completed its root formation. The third molar is only a crown.

present in localized areas, is not necessary. These centers are said to be located in the condylar and coronoid processes, the posterior aspect of the angle of the mandible, and at the alveolar crest.

This particular point brought out by Durbeck on early surgical removal of third molar teeth must not be overlooked as a contraindication to the operation. On the other hand, it also is apparent that malposed, impacted, and embedded third molars might possibly retard or disturb growth in these centers inasmuch as proof of other ill effects has been delivered many times.

Lloyd Warshauer,[13] of Tufts Dental School, found that in his studies of roentgenograms and other data collected on 320 male students there was a definite indication of a direct relationship between impacted third molars and caries. His conclusions were not so indicative of this condition as those I brought out some time ago. This I attributed to the age factor. The ages of Warshauer's experimental patients ranged from eighteen to twenty-five years, whereas the ages of my patients ranged from twenty-five to thirty years. Warshauer sums up his article with four concluding statements:

1. The number of cases of normal unilateral eruption is insufficient to be of much value.

2. Congenital absence of third molars may be a contributing factor in a slightly lowered incidence of contact caries.

3. Impacted third molars may be a small factor in adding to the slightly increased incidence of contact caries in such arches.

4. Asymmetrical eruption of third molars may be a factor in increasing by a small amount the incidence of contact caries.

Surgical Aid for Eruption of Third Molars

There are some who believe that extraction of the third molar is a radical, unnecessary procedure, and that by removing the tissues occlusal to the third molars, they can be made to erupt easily. It is evident that some third molars may be aided in their eruption in this way, but it is equally evident that not all of them can be handled successfully in this manner. The horizontal impaction, as well as the distal impaction and many of the mesioangular impactions, will not respond to this treatment. By removing the tissues occlusal to these teeth too early, I have found that in many instances a pocket is formed between the third molar and the bone. It must be remembered that there is no attachment of bone or soft tissue to the crown, except at the neck of the tooth, after the capsule containing the tooth is broken. This capsule is broken if all the tissues occlusal to the tooth are removed. If there is no attachment, food collects in this area. thus causing bone resorption and a larger pocket.

Regardless of any beneficial effect resulting from this tissue removal, the third molar, whether or not it erupts with straight roots, still produces a damaging pressure in eruption.

Conclusions

The following are important reasons why impacted third molars should be removed early:

1. That these teeth cause malocclusion and periodontitis has been definitely proved many times.

2. Third molars that eventually erupt are usually so far back in the mouth that full tissue eruption and hygiene are virtually impossible.

3. If this tooth is the only one on that particular side of the mouth to which a clasp may be applied to re-

[13]Warshauer, L.: Impacted Third Molars in Relation to Caries, Tufts D. Outlook 18:11 (March) 1944.

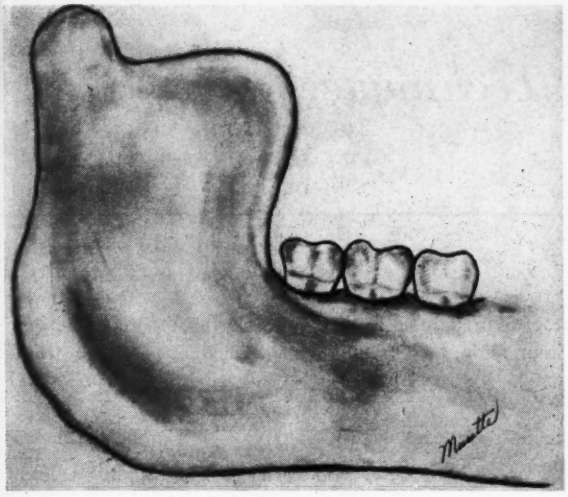


Fig. 11—Mandible of the Heidelberg man: Note the position of the third molar in relation to the ramus.

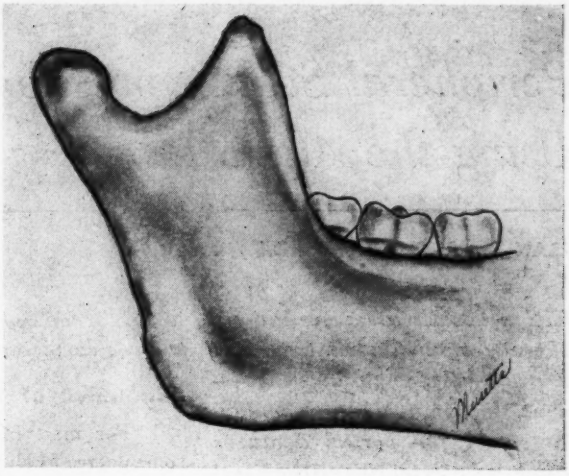


Fig. 12—Mandible of the modern man: Compare the relationship of this third molar to the ramus with that of the Heidelberg man.

tain a partial denture, it means that there is no mesial abutment tooth. In such a case, a third molar seldom remains in a vertical position but assumes a mesial slant. I am told by prosthodontists that a tooth malposed to this extent is contraindicated for the retention of a denture.

4. The harm brought about by pressure on nerves and vessels may not be exhibited in the local area; therefore, the condition may be far advanced before the etiology is recognized.

5. Interproximal caries may be retarded to some extent by early removal of third molars. The impacted third molar, for the best welfare of the patient, should be removed at an early age. The cases in which the third molars may be useful are in the minority and are greatly overshadowed by the harmful effects often produced by their retention.

718 *Union Avenue.*

ANNOUNCEMENT OF BOOKS RECEIVED

ANATOMY AS A BASIS FOR MEDICAL AND DENTAL PRACTICE, By Donald Mainland, M.B., Ch.B., D.Sc., First Edition, New York, Paul B. Hoeber, Inc., 1945, Price $7.50.

CONSTITUTION AND DISEASE, By Julius Bauer, M.D., Second Edition, New York, Grune & Stratton, 1945, Price $4.00.

ORAL PATHOLOGY, By Thomas J. Hill, D.D.S., Third Edition, Philadelphia, Lea & Febiger, 1945, Price $6.50.

FULL DENTURE TECHNIQUE, By W. J. Tuckfield, M.D.Sc., Sc.D., First Edition, Melbourne, Australia, The Australian College of Dentistry, University of Melbourne, 1944.

OPERATIVE DENTISTRY, By W. Clyde Davis, A.M., M.D., D.D.S., Fifth Edition, St. Louis, The C. V. Mosby Company, 1945, Price $7.50.

PRESCRIPTION WRITING AND MATERIA MEDICA FOR DENTISTS, By L. Richard Cipes, Ph.G., D.D.S., Second Edition, Brooklyn, Dental Items of Interest Publishing Company, Inc., 1945, Price $5.00.

FACIAL PROSTHESIS, By Arthur H. Bulbulian, M.S., D.D.S., First Edition, Philadelphia, W. B. Saunders Company, 1945, Price $5.00.

PRINCIPLES AND PRACTICE OF X-RAY TECHNIC AND INTERPRETATION, By H. W. Mustermann, D.D.S., First Edition, Brooklyn, Dental Items of Interest Publishing Company, Inc., 1945, Price $5.00.

PHARMACOLOGY AND DENTAL THERAPEUTICS, By Hermann Prinz, D.D.S., M.D.; U. Garfield Rickert, D.D.S.; and Edward C. Dobbs, D.D.S., Ninth Edition, St. Louis, The C. V. Mosby Company, 1945, Price $6.50.

ORAL HEALTH, By H. Shirley Dwyer, D.D.S., First Edition, Philadelphia and London, W. B. Saunders Company, 1945, Price $1.25.

STAINLESS STEEL WORK IN MECHANICAL DENTISTRY, By G. H. Siddle, Second Edition, London, Henry Kimpton, 1945, Price 5 shillings.

Peripheral Seal Impression Technique, Using the Alginates

ALAN A. AXELBAND, D.D.S., Brooklyn

This article discusses a technique whereby a muscle-trimmed tray is prepared for taking impressions for immediate full dentures and for partial dentures which have extensive tissue-bearing areas.

WITH EVERY method of taking impressions for partial dentures, or for immediate full dentures, there usually is at least one drawback with certain cases. How to master the particular difficulty sometimes perplexes the operator, who attempts several techniques with but limited success. The unilateral partial denture, or one that approximates it, usually is troublesome. It is the purpose of this article to suggest another method of taking impressions that might help in these cases. The same technique can be used with excellent results for immediate dentures.

I have no intention of being credited with an original technique. This technique has helped me so much in making both partial and full immediate dentures, that I am happy to pass it on to the readers.

Study Model

A good study model (Fig. 1) should be obtained as a preliminary step. Either trulastic or the alginates can be used for taking the impression. I have used the alginates for taking the impression by this technique. They were intended originally to be a substitute for the hydrocolloids, but have since been listed among the popular impression materials being used by dentists.

The importance of study models in making all partial dentures cannot be overemphasized. The study model has an additional value here in that it enables the operator to prepare a tray for the master impression.

Adaptation of Tray

1. For most immediate dentures, some degree of alveolectomy is necessary.

2. Undercuts frequently are present over the roots of the anterior teeth, and there may be undercuts in other parts of the mouth. Wherever they exist, place one to two thicknesses of adhesive tape on the study model (Fig. 2).

3. A single thickness of shellac baseplate is adapted over the entire model as though it were being made for a full denture. Oil or vaseline the tray on the model.

4. Then adapt a double-thickness

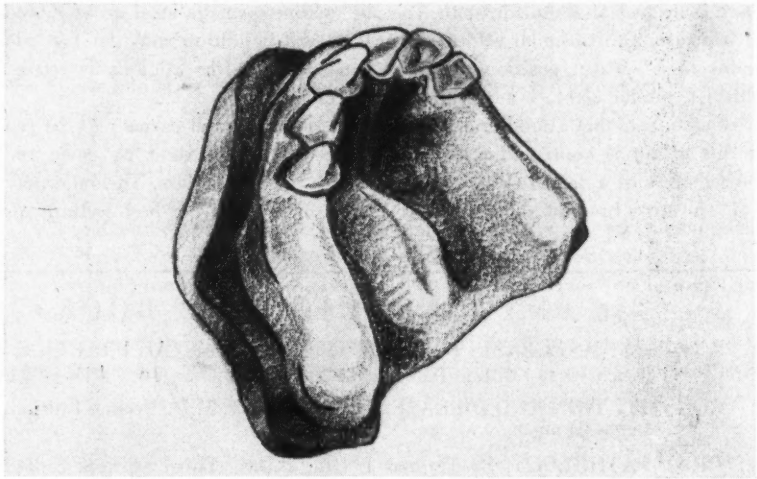


Fig. 1—Study model of upper jaw on which all the work is done.

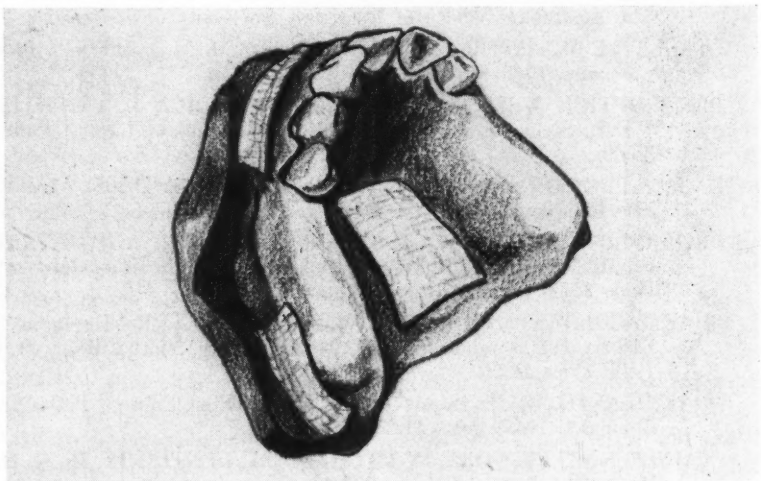


Fig. 2—Double-thickness adhesive tape over undercuts and hard area of palate.

shellac baseplate over the single-thickness tray (Fig. 3). This also is done as though it were for a full denture.

5. The single-thickness tray then is removed and put aside (Fig. 4).

6. Adapt softened medium-fusing compound to the double-thickness shellac tray (Fig. 4) in the postdam area, in the vault of the palate, and on the tissue-bearing areas.

Muscle Trimming

1. The double-thickness or "impression" tray is muscle-trimmed on the study model with low-fusing compound. This is done as though it were for a full denture. It is done even in the areas where teeth are present. The edges are not rolled but are allowed to be slightly irregular and to hang over inwardly. There should not, of course, be any sharp edges which might irritate the tissues. At this stage, the tray may be tried in the mouth for any necessary corrections.

2. Drops of molten sticky wax are placed at short intervals in the regions where there is no compound. A few small strands of absorbent cotton may be incorporated into the drops of sticky wax.

3. Using a hot wax spatula, notches are made in the modeling compound that previously was attached in the postdam and vault regions.

4. The "impression" tray is now ready to receive the alginate material. If a handle is desired, it can be made with modeling compound.

Advantages of Technique

The advantages of this technique incorporate the following:

1. Ease of mixing. (The alginates are as easy to mix as plaster.)

2. Muscle trimming of modeling compound.

3. Compression and displacement of tissue where compound is present.

4. The one-piece impression, like that with the hydrocolloids, is simple to take.

5. The preparation of the tray can be done either by the dentist or by his technician inasmuch as virtually all of it is done on the study model.

50 *Westminster Road.*

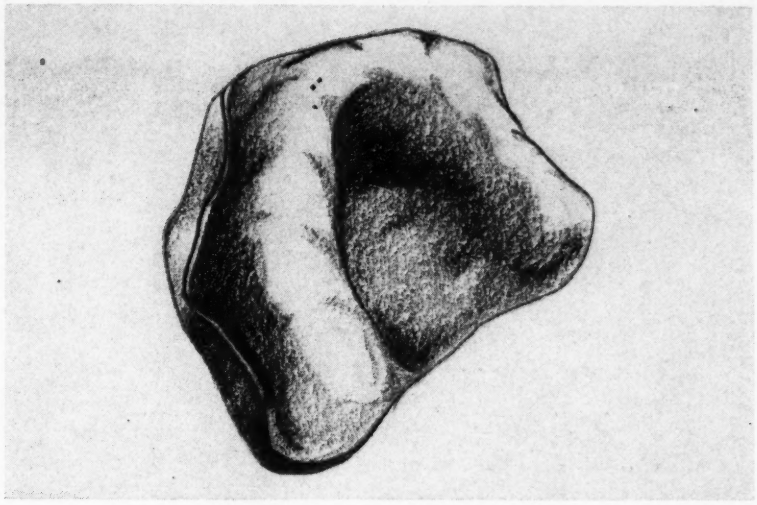


Fig. 3—Single-thickness baseplate covered by a double-thickness shellac baseplate.

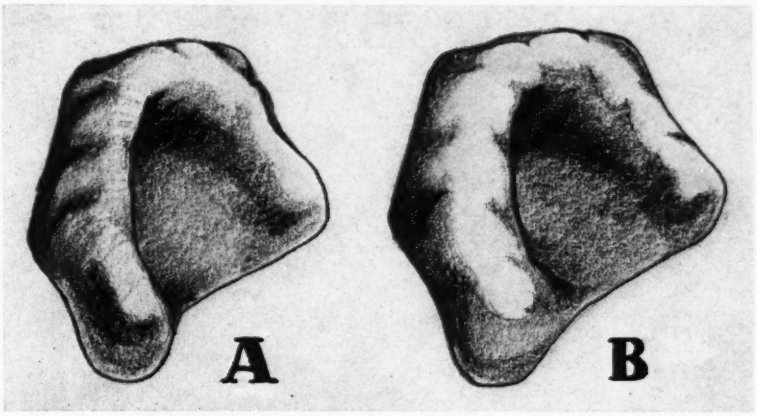


Fig. 4—(A) Single-thickness baseplate laid aside. (B) Double-thickness baseplate muscle-trimmed and postdammed.

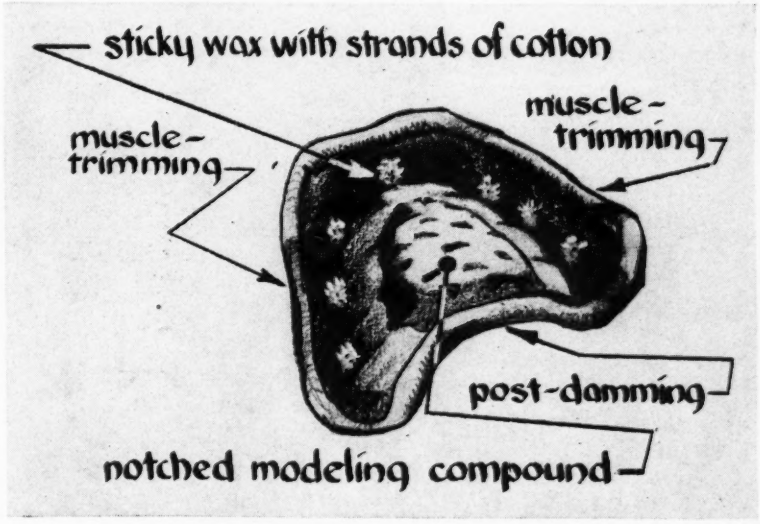
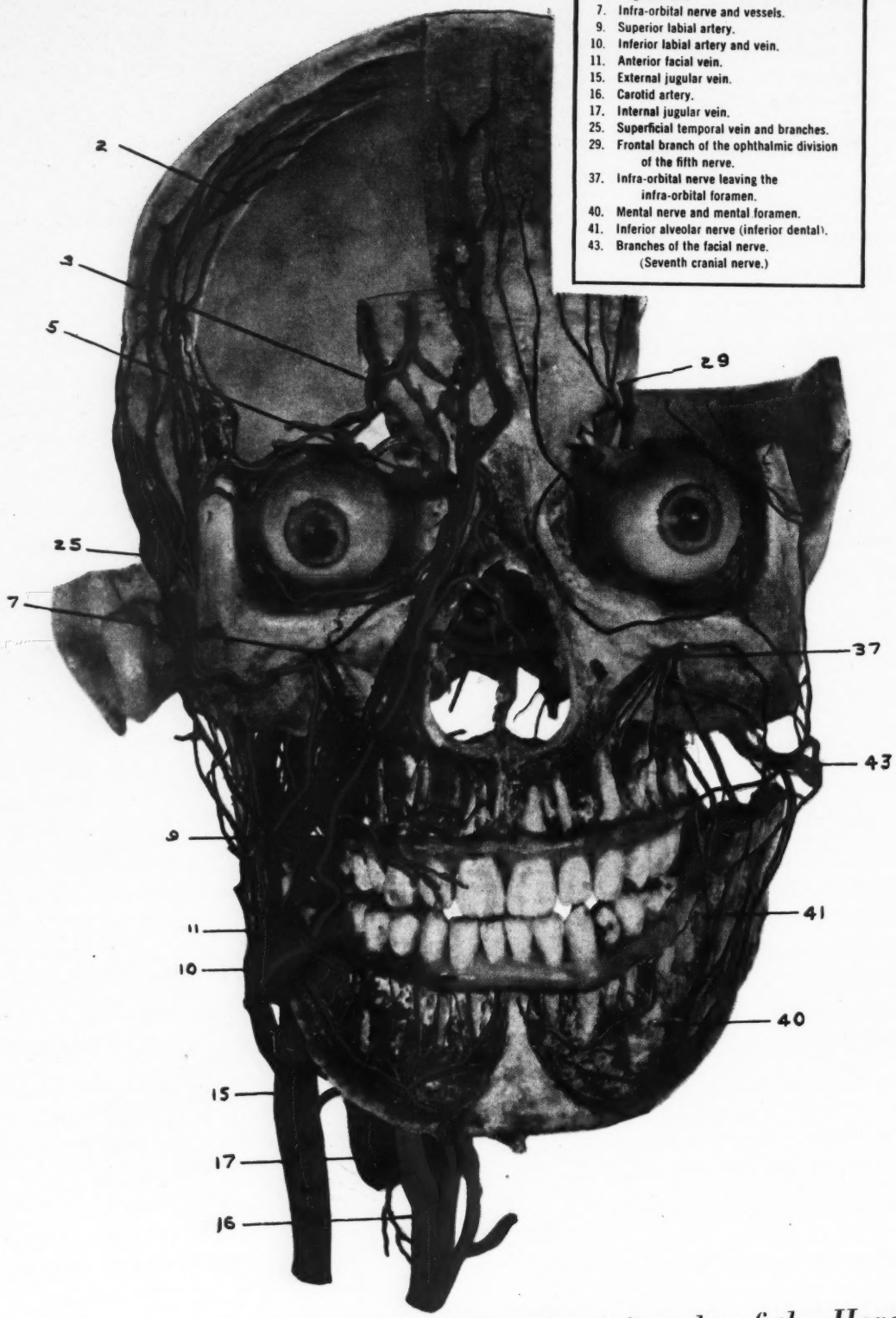


Fig. 5—Double-thickness baseplate inverted.

PLATE 3. VIEW FROM THE FRONT.

2. Dura of the brain.
3. Supra-orbital vessels and nerves.
5. Angular vein.
7. Infra-orbital nerve and vessels.
9. Superior labial artery.
10. Inferior labial artery and vein.
11. Anterior facial vein.
15. External jugular vein.
16. Carotid artery.
17. Internal jugular vein.
25. Superficial temporal vein and branches.
29. Frontal branch of the ophthalmic division of the fifth nerve.
37. Infra-orbital nerve leaving the infra-orbital foramen.
40. Mental nerve and mental foramen.
41. Inferior alveolar nerve (inferior dental).
43. Branches of the facial nerve. (Seventh cranial nerve.)



The Nerve Distribution and the Blood Supply of the Head From the Frontal View

Explanatory Note:

This is the third and final plate in a series of anatomic charts in full color. The first two charts appeared in the October and November issues.

The Editor's Page

A SIGNIFICANT report on the future of science was made to President Truman by Doctor Vannevar Bush, Director of the Office of Scientific Research and Development. The proposal was made that the federal government underwrite research in the annual amount of $122,500,000. This fund would be administered by a newly created agency, the National Research Foundation. One of the divisions within the Foundation would support research in the medical field and in the related fields of biologic science. This division would expend $20,000,000 each year. The entire program is of a long-term nature, because short-term projects would defeat the purpose of basic research. This new agency would be administrative rather than operational. No federal laboratories would be created. All studies would be undertaken through contracts or grants to colleges, universities, and research institutes. To encourage the development and training of young men and women in scientific methods, the federal government would provide undergraduate scholarships and graduate fellowships to persons of promise.

The report described the methods for studies in the medical field in these words: "Research in medicine may be carried out effectively in two ways: first, by a coordinated attack on a particular disease; or second, by independent studies of the fundamental nature of the human body and its physiologic mechanisms, of the nature of bacteria, viruses, and other agents of disease, and of the influence of environment on both. An example of the first method is the attack on malaria carried out under the Army, Navy, Public Health Service, the National Research Council, and the Office of Scientific Research and Development. The discovery of penicillin is an example of the second method: Fleming noted that a common mold, *Penicillium notatum*, inhibited the growth of a culture of bacteria in which it appeared as a contaminant. Thus an incidental observation in the course of studies unrelated to chemotherapy furnished the basis for the ultimate development of the most valuable chemotherapeutic agent known."

The same methods naturally apply to studies directed toward dental caries and periodontal disease. Neither of these diseases can be approached by methods that are not based on sound scientific procedures or by methods that do not take into account the intimate relationship between Total Man and his oral diseases. Research must be directed toward the causative factors in oral disease and also toward the influence of oral diseases on Total Man.

No mention, by single word or phrase, was made in the report to oral diseases, that likewise "cause incalculable disability." This omission of Man's most widespread disease is one that we have learned to anticipate with chagrin. Seldom is reference made in reports of this nature to dental diseases, although the American people spend half a billion dollars annually for the treatment of these conditions. Despite this expenditure, the American people do not receive adequate dental care. It is estimated that a comprehensive program of dental treatment would cost ten times as much as is now spent: five billion dollars a year until all accumulative dental defects were corrected. Although no practical person would suggest that the government finance such an expenditure for dental treatment, we should point out to the Office of Scientific Research and Development that oral diseases result in widespread human misery and that their prevalence is a blight on the health and wealth of the Nation.

No one should oppose the worthwhile objectives set forth for the National Research Foundation: "On the wisdom with which we bring science to bear against the problems of the coming years depends in large measure our future as a nation."

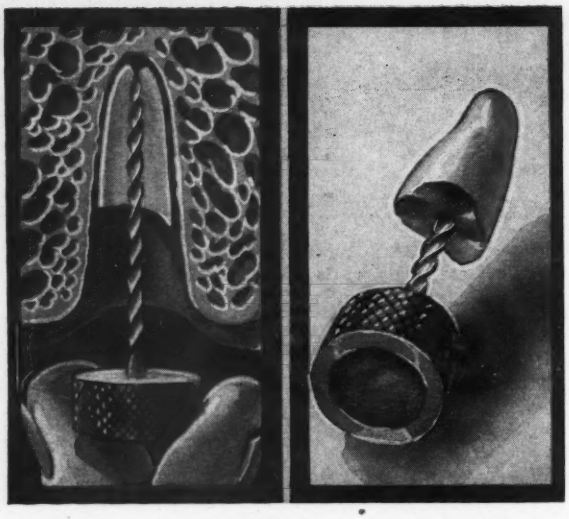


Fig. 1

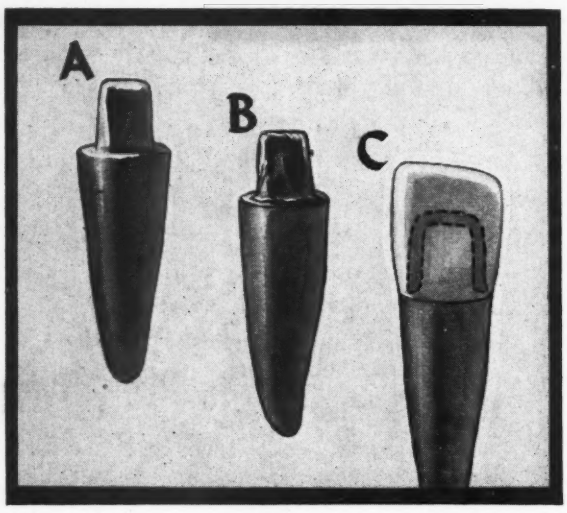


Fig. 2

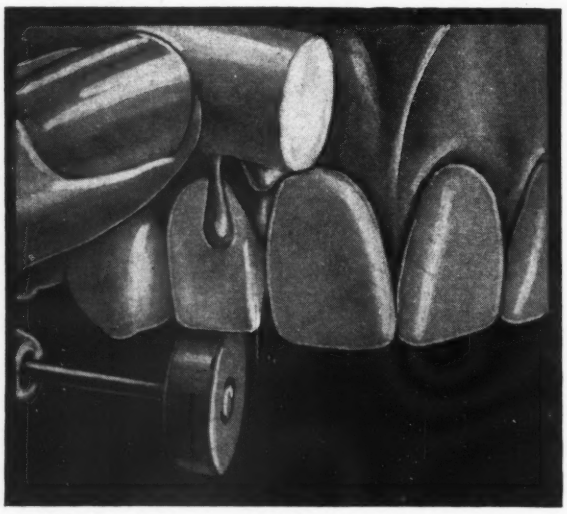


Fig. 3

Clinical and Laboratory

A Method of Removing Broken Root Fragments

Captain Milton Haveson (DC) AUS, A.P.O. New York

Fig. 1—In some cases of root fracture during tooth extraction, a root canal reamer may be used to deliver the fragment. This method is not used when a root fragment has a pronounced curvature. The reamer is inserted into the canal until it engages the root fragment firmly, and then is withdrawn.

Reinforcement for the Acrylic Crown

Robert E. Keith, D.D.S., Ardmore, Oklahoma

Fig. 2—An alloy die (A) is made in the usual way. A piece of platinum foil (B) is swaged over the die. The foil is painted with borax, and solder is flowed over it. It is not necessary to use investment. The foil is held over a flame by means of soldering pliers. The reinforced metal matrix (C) assures rigidity of the acrylic crown.

Keeping the Tooth Moist During Operative Procedures

Maurice J. Teitelbaum, D.D.S., Newark, New Jersey

Fig. 3—Place cotton rolls in a cup of water on the bracket table, and use them one at a time under the lip when preparing an upper tooth for a jacket crown. Slight pressure on the moist cotton roll causes the water to trickle over the tooth, thus keeping the tooth cool during the operation.

Readers are Urged to Collect $10.00

For every practical clinical or laboratory suggestion that is usable, THE DENTAL DIGEST will pay $10.00 on publication.

You do not have to write an article. Furnish us with rough drawings or sketches, from which we will make suitable illustrations; write a brief description of the

...SUGGESTIONS . . . .

A Matrix Band Cut on the Bias

Captain Sidney R. Winett (DC) AUS, A.P.O. San Francisco

Fig. 4—Using a sheet of .002-inch matrix band metal, start at one corner and scribe concentric lines with a compass. When the bands are cut along these outlines, strips are produced that conform better to the contour of posterior teeth than do straight strips.

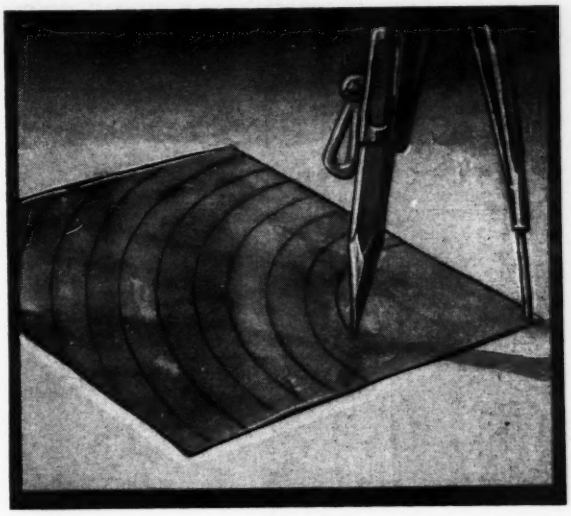


Fig. 4

A Method of Making Small Roentgenograms

Enrique Estrada H., D.D.S., Guatemala, Central America

Fig. 5—It is often desirable to use an x-ray film that is smaller than the regular size. In such cases, the regular-size film may be bent, leaving the tube side on the outside. Some film packets require no further treatment. In others it is necessary to place a thin strip of lead between the bent halves. In such cases the lead strip may be held in place by Scotch tape.

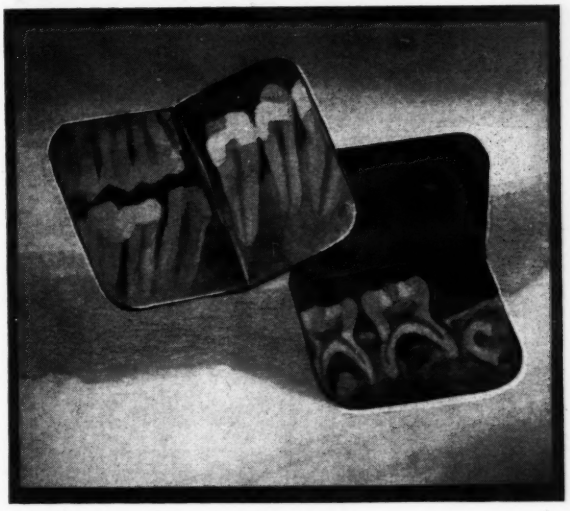


Fig. 5

Partial Denture Repairs

Harry D. Hoffman, D.D.S., St. Louis

Fig. 6—Press the broken partial denture (A) into a piece of carding wax. Manipulate the broken sections until the break is closed and alined correctly. Next, attach toothpicks to the denture with sticky wax (B). Now that rigidity is assured the carding wax is removed and a model is poured.

(*Continued on page* 700)

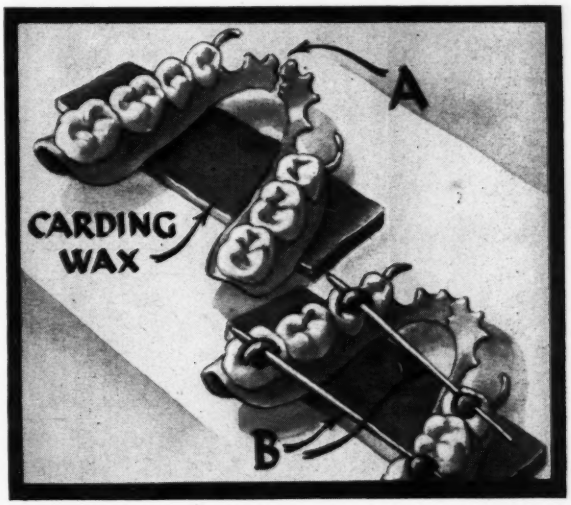


Fig. 6

technique involved; and jot down the advantages of the technique. This shouldn't take ten minutes of your time.

Turn to page 702 for a convenient form to use.

Send your ideas to: Clinical and Laboratory Suggestions Editor, THE DENTAL DIGEST, 708 Church Street, Evanston, Illinois.

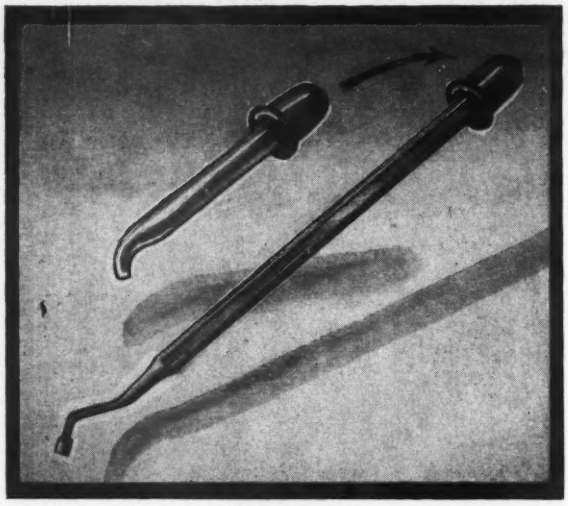


Fig. 7

A Shock-Proof Malleting Instrument

Captain D. O. Lipman, CDC, Camp Borden, Ontario

Fig. 7—When condensing amalgam or gold, the contact between the metal plugger and the mallet is annoying to the patient. To cushion and absorb the malleting shock, the rubber end of a glass dropper is stretched over the end of the plugger. The rubber tip may be sterilized in any manner desired.

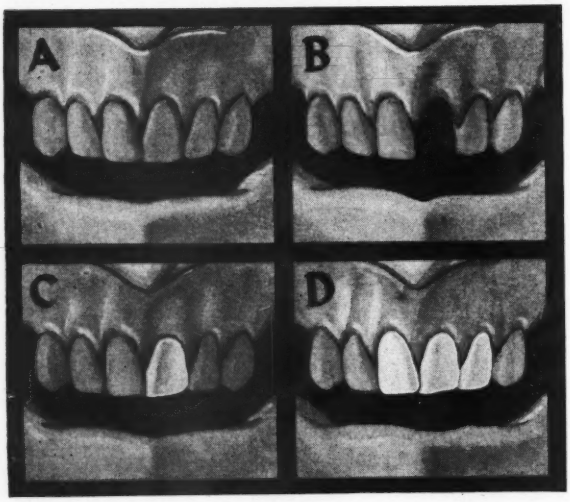


Fig. 8

Duplication in Immediate Dentures

Captain George B. Glazier (DC) AUS, Fort Dix, New Jersey

Fig. 8—With the casts mounted on the articulator (A), begin by removing a central incisor. Relieve the model as shown in (B). Select a tooth of proper mold and shade, and grind it to harmonize with the other teeth (C). Continue removing and replacing the teeth individually until all are in position.

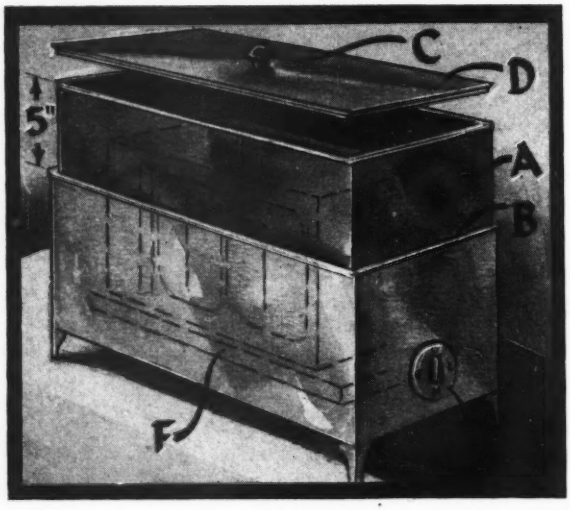


Fig. 9

An Acrylic-Processing Unit

Harry H. Sandler, D.D.S., Boston

Fig. 9—This unit utilizes the old-type electric sterilizer with a three-way switch (E). A 5-inch copper addition (A) is soldered to the sterilizer at (B), and a wooden knob (C) is placed on the original cover (D). A block of wood (F) is placed in the bottom of the sterilizer to hold the flasks. The "low" switch will maintain the water at a temperature between 160° F. and 180° F.; the "medium" switch will boil water in about forty-five minutes; and the "high" switch will boil water in about twenty minutes. In processing the acrylic, it is recommended that the flask be placed in cold water and the switch set at "medium." Boiling should be maintained for an hour.

SUGGESTIONS (Continued from page 699)

Additional Protection for the Operating Gown

William B. Struthers, D.D.S., Wellington, New Zealand

Fig. 10—The left sleeve of the operating gown frequently is exposed to soiling from the hair of the patient. To protect this sleeve while operating on patients with oily hair, pin over it a sleeve cut from an old gown.

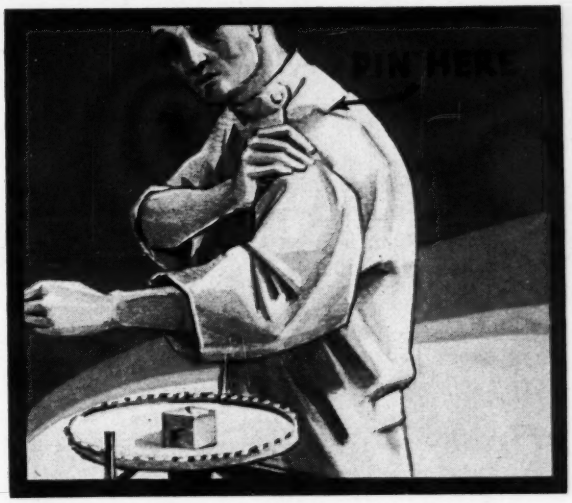


Fig. 10

A Close-Fitting Copper Band for Indirect Impressions

B. Placek, D.D.S., Chicago

Fig. 11—Fit and contour a copper band (A), and pinch the band with a pair of small, flat-nosed pliers (B). The extension (C) acts as a handle for use in removing the band and when filling the impression with amalgam or die stone.

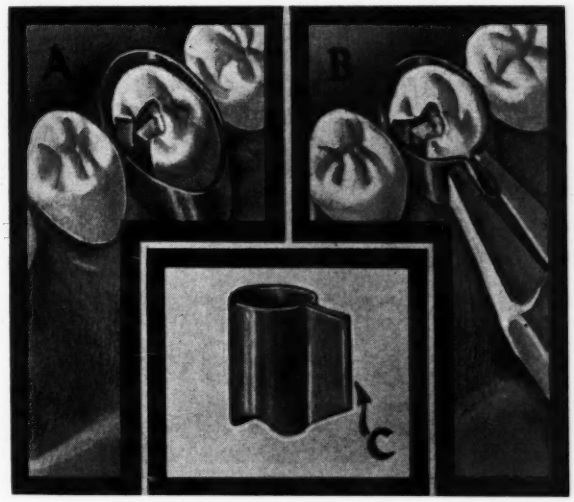


Fig. 11

Uses for Sterile Wicking

Lauren J. Ennis, D.D.S., Oakland, California

Fig. 12—Cut a number of ¼-inch pieces of orasorb, a sterile wicking. Place the pieces in phenol, remove, and separate the strands with the aid of a pointed instrument (A). The phenol-impregnanted individual strands may be used for cavity sterilization. The wicking also may be used to preserve dryness of cavities in or near the gingival margin (B). The wicking is likewise useful for keeping the shoulder of a jacket crown preparation dry before cementing the crown. While the cement is being mixed, the wicking is inserted at the shoulder and is held in position with the celluloid crown form (C).

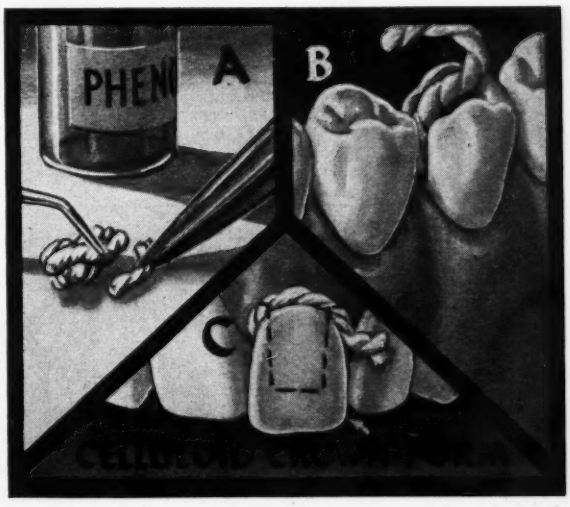


Fig. 12

CLINICAL AND LABORATORY SUGGESTIONS

Form to be Used by Contributors

To: Clinical and Laboratory Suggestions Editor
THE DENTAL DIGEST
708 Church Street
Evanston. Illinois

From:_____

_____

Subject:_____

Explanation of Procedure:

Sketch:

$10 will be paid to author on publication of accepted suggestion.

Annual Index
1945

Page

ANATOMIC RECONSTRUCTION

Bulbulian, A. H.: Facial Prosthesis, July 380
Erpf, S. F.; Dietz, V. H.; and Wirtz, M. S.: Prosthesis of the Eye in Synthetic Resin: A Preliminary Report, October 557
Malcolm, J. A.: Techniques for Taking Accurate Ear Impressions, August. 434
Murphey, P. J., and Schlossberg, Leon: Eye Replacement by Acrylic Maxillofacial Prosthesis, February 72
Penhale, K. W.: Acrylic Resin as an Implant for Correction of Facial Deformities (An Abstract), November 656
Quiroga, J. M.: Restoration of the Plane of Occlusion and the Vertical Dimension, November 623
Quitt, S. L.: Correction of Extreme Protrusion of the Maxilla and Atrophy of the Left Mandible, December 686
Schweitzer, J. M.: Occlusal Reconstruction Using an Anatomic Technique, June 316

ANESTHESIA

Inadvertent Injection of Sodium Pentothal into an Artery (An Abstract), April 182
Prehn, D. C.: Pentothal Sodium Anesthesia in Dentistry, May 238
Ruffine, L. R.: Immediate Dentures Under Nitrous Oxide-Oxygen Anesthesia, June 304

AVIATION DENTISTRY

Devoe, Keith, and Motley, H. L.: Aerodontalgia, January 16
Vaughan, H. C.: Traumatic Temporomandibular Articulation Syndrome (An Abstract), May 273

CARIES

Bourgoyne, J. R.: Early Removal of Third Molars for Caries Prevention, December 689
Plater, W. R.: Significance of Dental Caries in Malocclusion (An Abstract), November 663
Schnack, A. G.: The Acid Gastric Reflux as a Cause of Dental Caries, March 136

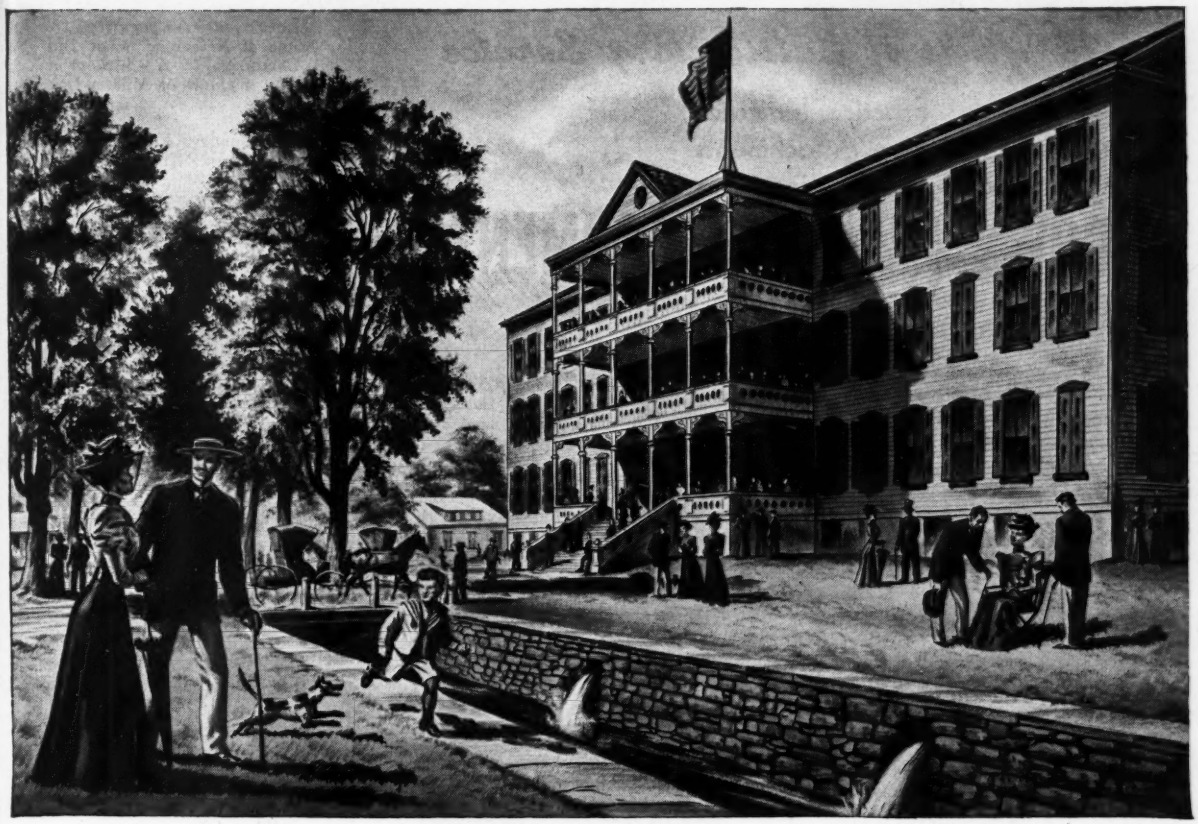
CLINICAL AND LABORATORY SUGGESTIONS

January 28
February 84
March 132
April 192
May 254
June 312
July 376
August 446
September 506
October 566
December 698

CONTRA-ANGLES

January
Old Doc Brady Softening Up; I Mean; Doctor Fishbein Retreats; The Great Moment; Speaking of Polls 32
February
Who Gets the Toothbrush?; Good Teeth for Everybody; Sucker for a Catalogue 88
March
Watch Stassen; So Sorry; Farm Sale; You are Not Getting the Truth 142
April
This is No Time for Intolerance; In

(*Continued on page* 706)



Hot Springs, Arkansas, in the Nineties

TODAY A SPARKLING SALINE LAXATIVE WHEREVER NEEDED

A stay of several weeks in a Spa is beyond the reach of many patients. Yet one important feature of most Spas is available to everybody wherever and whenever needed—a sparkling saline laxative.

Analyses of famous mineral waters have indicated that sodium sulfate, sodium chloride and sodium bicarbonate are often the most important ingredients. These same salts are skillfully combined with sodium phosphate lithium carbonate and tartaric acid in pleasant-tasting SAL HEPATICA to create gentle "Liquid Bulk" for effective cleansing of the intestinal tract.

For a gentle, more efficient laxative or thorough cathartic—direct your patients to dissolve SAL HEPATICA *in a large glass (8 oz.) of water. Laxative Dose: 1 to 2 level tsps. Cathartic Dose: 4 level tsps.*

A Product of Bristol-Myers Company, 19EN West 50th Street, New York 20, N. Y.

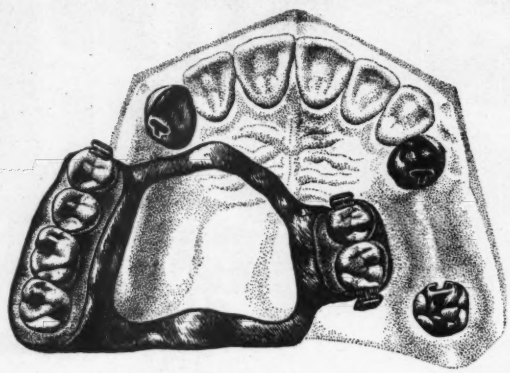
TO HELP FLUSH THE INTESTINAL TRACT

Sal Hepatica SUPPLIES **Liquid Bulk!**

25 Years of Satisfactory Service

Where Better Practice Indicates the Use of Precision Attachments for Removable Restorations ★ ★ *Specify*

BROWN PROXIMAL CONTACT ATTACHMENTS



BROWN PRECISION ATTACHMENTS have been used successfully since 1920, when patents were granted to their inventor, Dr. I. Brown. This event followed by only a few years the publicity and impetus that Dr. Herman Chayes gave to the advance in removable restorations by the introduction of the precision type of attachment.

Another Case . . . . Where Precision Attachments Are Indicated

The use of Precision Attachments is indicated in this case because they eliminate need of a cumbersome continuous clasp across anteriors from cuspid to 1st bicuspid, which would be required in a clasp case in addition to clasps on the three abutment teeth.

Precision attachments make the case more comfortable to the patient and more esthetic, avoiding the display of unsightly clasps, particularly on the cuspid and first bicuspid.

Send for 12 Design Charts of Attachment Cases with Descriptive and Technical Literature.

So simple, yet so effective and practical are the design and mechanical principles employed in Brown Attachments, that they have defied every effort to improve upon them for 25 years. Except with the addition, about 10 years ago, of the proximal contact type, to give the convenience of a built-in proximal contact, no change in design has been made. The sizes of the Brown Attachment made today are identical with those made 25 years ago—a comforting thought if replacement parts are required.

If you have a doubtful case, send us the study casts in occlusion, and we shall be glad to write you the opinion of our professional consultant as to whether the use of Precision Attachments is indicated.

[As makers of attachments, we are as anxious to discourage their use where contra-indicated as to encourage it where indicated.]

COLUMBIA DENTOFORM CORPORATION

131 East 23rd Street **New York 10, N. Y.**

FOR WEARERS OF DENTURES

Mu-col

REG. U.S. PAT. OFF.

Samples sent on request.

Thousands of users of dentures are especially grateful to MU-COL and to the dentists who recommend it. Its cooling and soothing properties give comfort after extractions and during the troublesome period of becoming accustomed to plates. Its detergent qualities make it a superior cleanser for dentures and as a mucous solvent it always helps promote sanitary mouth conditions. MU-COL is a balanced saline-alkaline bacteriostatic in powder form, quickly soluble.

THE MU-COL CO., Dept. DD-125, Buffalo 3, N. Y.

(*Continued from page* 702)

the Name of Research; What Did Your Doctor Say?; A Chicken in Every Pot, a Quart of Milk a Day for Everybody 204

May
Science on Sunday; Picture of the Year; The Pause; The First Message; Fireside Chat 262

June
Fit the Patient to the Dentures; Fighting It Out in the Headlines; Mail Call; Some of My Best Friends are Fellows 330

July
A Hand to Mr. Kelly; High Pressure Neurotics; "Save Paper," says the Government; Up Go the Dues; Is the Dentist an Educated Man?; Always and Never; Doctors Must Eat 392

August
The Irony of Science; The Dental Charter; Life is Like That; Ask Me and I Will Tell; Freedom is More than a Word 451

September
From The Earth Comes Life; Weston A. Price; A Lawyer Has His Say; What I Wish I Could Learn From My Dog; Army Wife 512

October
Down to Pleasant Valley; Sleep; Interesting, If True; Attitudes of Returning Veterans to Dentistry; "Doctor" Prefix 576

November
Old Doc Brady Rides Again; Bugs Need Food, Too; Don't Be Funny; If We Would Strike, Too 646

December
No Farewell to Teeth; Men Who Endured; This is Better 716

CROWN AND BRIDGE

Levy, Saul: Reinforcement in Acrylic Bridge Construction, March..... 128

Rudolph, Joseph: The Cast Gold Crown, February 68

Salisbury, G. B.: A Copper Band Impression Technique for Jacket Crown Restorations, January 23
Modern Trends in Dental Acrylics, April 196

Silverman, S. M.: Staining of Acrylic Jacket Crowns and Pontics, October 570

Smothers, I. A.: Indications for and Preparation of a MacBoyle Bridge Abutment, April 176

DENTURES, FULL AND PARTIAL

Axelband, A.A.: Peripheral Seal Impression Technique in Immediate and Partial Dentures, December ... 694

Billings, M. J.: Preservation and Transfer of the Natural Bite, July. 364

Bizzozero, G. A.: The Importance of the Overjet in Full Denture Construction, November 613

Border, S. L.: Compression Molding of Acrylic Dentures, January..... 19

Harguindeguy, Roberto: Partial Denture Prosthesis (Resiliency in Articulation), November 628

Hawkes, L. A.: The Roofless Denture, September 498

Lakner, L.: The Surgical Retention of Full Dentures (An Abstract), March 152

Lakner, Leon: The Surgical Retention of Full Dentures, July 373

Levy, Saul: Science Versus Technique in Taking Full Lower Impressions, August 440

Oliveira, de, V. M.: A Flexible Rest in the Removable Partial Denture, December 685

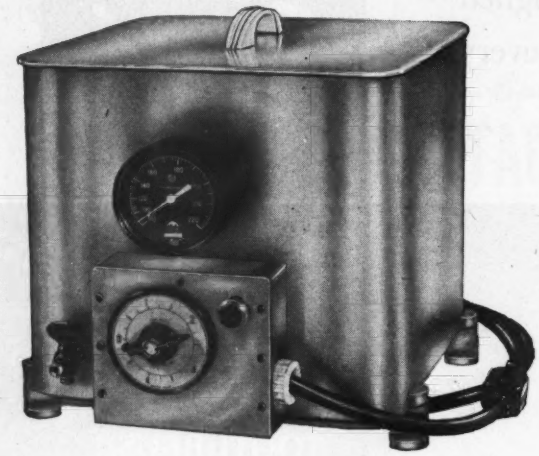
Quiroga, J. M.: Restoration of the Plane of Occlusion and the Vertical

Scientifically designed to reach every exposed surface of every tooth more easily and effectively.

SQUIBB *A name you can trust*

MANUFACTURING CHEMISTS TO THE MEDICAL AND DENTAL PROFESSIONS FOR 86 YEARS

Hygienic Thermolator



Model A-10
Water Bath
Price $145

Capacity
Ten Flasks
(Five 2-Case
Clamps)

"Another Quality
Hygienic Product"

for accurate, automatic curing of acrylic dentures

The Thermolator is something you have always wanted. It makes curing of acrylic dentures automatic, accurate and simple.

Cases may be cured as they are packed and removed to make way for others, making a continuous operation at constant temperature. The Thermolator can be set for night operation with dentures ready to finish in the morning.

It has an accurate, foolproof temperature adjustment with safety device that protects it should current be turned on without water in the bath.

The Thermolator is expertly engineered equipment that will give you many years of satisfactory service. It will quickly pay for itself by the operators' time it saves. Order from your dental dealer or write today for our folder that gives complete facts on Thermolators.

The Hygienic Dental Rubber Co. • Akron 8, Ohio

KREX
Impression
CORRECTIVE

Another LEE SMITH Achievement

A BETTER Oxy-Eugenol Corrective Wash

KREX mixes and handles with great ease . . . sets quickly or slowly in the patient's mouth as the case requires and according to your own mix . . . reproduces accurate detail. Truly a superior product! Order a box of KREX today and begin making *perfect fitting* dentures.

LEE S. SMITH & SON MFG. COMPANY
7325 Penn Ave. Pittsburgh 8, Pa.

Dimension, November 623
Reyer, E. A.: Full Lower Impression Procedure, March 125
Ruffine, L. R.: Immediate Dentures Under Nitrous Oxide-Oxygen Anesthesia, June 304
Slaughter, M. D.: Speech Correction in Full Denture Prosthesis, May... 242
Sloss, C. L., and Rubinstein, M. N.: A Simplified Full Lower Denture Impression Technique, September . 486
Vopata, W. O.: Electrosoldered Wrought-Wire Partial Dentures, April 183

EDITORIALS
(The Editor's Page)

Fibrin Foam in Hemostasis, January.. 27
A Pain Threshold-Raising Drug, February 83
Fluoride Water Experiments, March.. 139
Premenstrual Tension, April 191
Vaccination for Dental Caries, May.. 253
Complications of Tooth Extraction, June 324
The Fatigue State, July 387
Medico-Dental Courtesies, August ... 445
Dentistry and Cancer Control, September 507
Leukemia, October 572
Internationalism in Dentistry, November 640
Our Colleagues to the South, Guest Editorial by V. H. Sears, November 612
Dental Research in a National Plan, December 697

EXODONTIA

Bourgoyne, J. R.: Early Removal of Third Molars for Caries Prevention, December 689
Keith, J. H.: A Simplified Technique for Exposing the Unerupted Maxillary Cuspid, September 490
Ogus, W. I.: Early Exposure of the Third Molar to Prevent Infection and Impaction, January 12
The Structures Involved and the Pathways Followed in Fatal Infections After Tooth Extraction (An Adaptation), June 325

MEDICAL AND BIOLOGIC SCIENCES

Altered Taste in Dengue (An Abstract), February 102
Callar, Donald: Moniliasis, August.. 439
Dickson, F. R.: Treatment of Acute Hematogenous Osteomyelitis (An Abstract), March 154
Hauser, E. D. W.: The Orthopedist Looks at the Dentist, June..... 296
Schultz, L. W., and Shriner, Walter: Treatment of Acute and Chronic Traumatic Temporomandibular Arthritis (An Abstract), June..... 323
Smith, C. A. H., and Light, R. F.: Low Calcium Diet: Dental Effects (An Abstract), August 462
Stern, Leo: The Treatment of Acute and Chronic Infections of the Jaw with Antibiotics (An Abstract), September 519
The Nerve Distribution and the Blood Supply of the Head (Color Feature), October 556
November 617
December 696
Therapy of Acute Leukemia (An Abstract), October 565
Treatment of Labial Sunburn (An Abstract), July 408
Upsher, A. E.: Medico-Dental Relationship (An Abstract), May..... 252

MILITARY

A Helmet of Acrylic for Protection Against Craniocerebral Injuries (An Abstract), July 390

(*Continued on page* 713)

(*Continued from page* 708)
Hidden Excesses of Supplies (An Abstract), July 372
Maxillofacial Injuries (An Abstract), July 372
Maxillofacial Wounds in Forward Installations (An Abstract), May ... 246
New Guinea Mouth (An Abstract), August 466
Ninety Cases of Fractured Jaws (An Abstract), September 504
Van Der Aue, O. E., and Cullen, V. R.: Gingivitis Among Submarine Personnel (An Abstract), May.... 275

OPERATIVE DENTISTRY
Bradley, A. M.: The Alkalinization of Mercury, February 87
Caorsi, U. A.: A New Retractor for Oral Surgical Procedures, November 620
Dumont, A.: Sharpening of Excavators and Chisels (An Abstract), November 619
Gerlach, Elsie: Operative Care for Deciduous Teeth, May 258
McAllister, K.: Three Insufficiently Utilized Operating Aids (An Abstract), June 311
Maeth, Harry: Fiberglas Used as a Root Canal Filling Material (Preliminary Report), October 555
Pinto, F. E.: A Modification of the Pinledge Inlay Technique, November 617
Prime, J. M.: Questions and Answers on the Use of Ammoniacal Silver Nitrate, April 178
Removal of Stains (An Abstract), January 48
Schroeder, Godfrey: A Technique for Silicate Cement Restorations in Anterior Teeth, July 370
Schweitzer, J. M.: Occlusal Reconstruction Using an Anatomic Technique, June 316
Tuma, C. F.: Modern Amalgam Manipulation for the Dental Assistant, February 64

ORAL SURGERY
Fuchs, Egon: A Case of Replantation (An Abstract), September 535
Gross, P. P.: A Simplified Method of Obtaining Elastic Traction in Treating Jaw Fractures, August 433
Ingham, G. G.: Extra-Oral Pin Fixation in Reducing Mandibular Fractures: Haynes-Griffin Splint, May 247
Maxillofacial Wounds in Forward Installations (An Abstract), May.... 246
Meistroff, C. L.: An Improved Method of Intermaxillary Fracture Wiring, October 552
Ninety Cases of Fractured Jaws (An Abstract), September 504
Panatt W., Leopoldo: Extra-Oral Retention Splints, November 631
Thistlethwaite, G. E.: External Pin Fixation: Roger Anderson Method, July 388
Winkler, N. D.: Impregnated Gauze Drains, April 189

ORTHODONTICS
Dewel, B. F.: Clinical Diagnosis and Treatment of Palatally Impacted Cuspids, September 492

PATHOLOGY
Andrews, J. N.: Acute Pericoronitis (An Abstract), August 461
Cocker, G., and Bigger, J. W.: The Etiology of Subacute Ulcerative Gingivitis (An Abstract), September .. 528
Finnerud, C. W.: Perleche: Its Nosologic Status (An Abstract), January 46
Guardo, R. C.: Surgical Treatment of Oral Lesions Resulting from Prostheses, November 635

FOR DENTISTS
WHO WANT A
Dependable Disinfectant

●Here is a disinfecting solution of unusually high germicidal and bacteriostatic potency even in low concentrations, yet so mild that it will not irritate tissue and so compatible with such substances as procaine, tissue fluids, etc., that it can be used freely for intra or extra oral antisepsis.

When you want a disinfectant to maintain the sterility of your hypodermic equipment and other instruments, disinfect your hands prior to operations, disinfect prosthetic appliances, bracket table tops, and for the many other such routine, but important, uses inherent in the dental office, you'll find Zephiran Chloride a ready answer.

Like other "Carpule" brand products, it will do a thorough, dependable job.

COOK-WAITE Laboratories, Inc.

"CARPULE" REG. NAME COOK-WAITE LABORATORIES, INC.

170 VARICK STREET, NEW YORK 13

Laboratories: Wasaulieg, W. Va. & Springville, N. Y.

BINDERS

available again. Each holds a complete volume.

Price, $2.75

THE DENTAL DIGEST 1005 Liberty Ave. Pittsburgh 22, Pa.

VITALLIUM

New standards of ideal oral fit and good function in partial removable bridges have been established in Dental Prosthetics as a result of the critical demand for precise Vitallium castings for the superchargers on our combat planes.

OTHER GOOD AUSTENAL PRODUCTS:
Austenal Micromold Teeth
Vitalon Acrylic Resin Teeth
Vitalon Denture and Bridge Resin

MICROCAST · VITALLIUM · TECHNIQUE

★TRADEMARK REG. U. S. PAT. OFF.

Prescribe through your VITALLIUM LABORATORY

AUSTENAL

LABORATORIES, *Inc.* NEW YORK · CHICAGO

McAllister, K.: Factors in Recurrent Gingivitis (An Abstract), November 627
Similarity of Mouth and Vulvar Lesions (An Abstract), December ... 722
Stern, Leo: The Treatment of Acute and Chronic Infections of the Jaw with Antibiotics (An Abstract), September 519

PENICILLIN

Coleman, R. M.: Penicillin in Treatment of Vincent's Angina (An Abstract), March 156
Grace, E. J., and Bryson, V.: Penicillin Topically (An Abstract), October 556
MacGregor, A. B., and Long, D. A.: Penicillin Pastilles in the Treatment of Acute Ulcerative Gingivostomatitis (An Abstract), May 260
Penicillin Packs in the Treatment of Vincent's Infection (An Abstract), July 386
Rubber Tubing in Penicillin Drip (An Abstract), September 504
The Use of Penicillin in Vincent's Angina (An Abstract), October 590

PERIODONTIA

Christensen, George: Paraffin in the Treatment of Periodontal Disease (An Adaptation), June 307
Gratzinger, Max: Elimination of Periodontal Pockets by Chemical Cautery, March 120

PLASTICS

A Helmet of Acrylic for Protection Against Craniocerebral Injuries (An Abstract), July 390
Bulbulian, A. H.: Facial Prosthesis, July 380
Erpf, S. F.; Dietz, V. H.; and Wirtz, M. S.: Prosthesis of the Eye in Synthetic Resin: A Preliminary Report, October 557
Leader, S. A.: Glass Fibers as Acrylic Strengtheners (An Abstract), April 190
Malcolm, J. A.: Techniques for Taking Accurate Ear Impressions, August 434
Murphey, P. J., and Schlossberg, Leon: Eye Replacement by Acrylic Maxillofacial Prosthesis, February 72
Penhale, K. W.: Acrylic Resin as an Implant for Correction of Facial Deformities (An Abstract), November 656
Salisbury, G. B.: Modern Trends in Dental Acrylics, April 196
Silverman, S. M.: Staining of Acrylic Jacket Crowns and Pontics, October 570

ROENTGENOLOGY

Frank, Leonard: Control of Mandibular Roentgenograms by Fixed Positioning, December 680

VINCENT'S INFECTION

Chace, Richard: The Prevention of Recurrent Vincent's Infection (An Abstract, November 634
Coleman, R. M.: Penicillin in Treatment of Vincent's Angina (An Abstract), March 156
Hartman, H. A.: The Present-Day Concept of Vincent's Infection (Part One), August 428
(Part Two), September 501
New Guinea Mouth (An Abstract), August 466
Penicillin Packs in the Treatment of Vincent's Infection (An Abstract), July 386
The Use of Penicillin in Vincent's Angina (An Abstract), October 590
Zodda, F. J.: Sulfathiazole Paste in Vincent's Infection (An Abstract), May 278

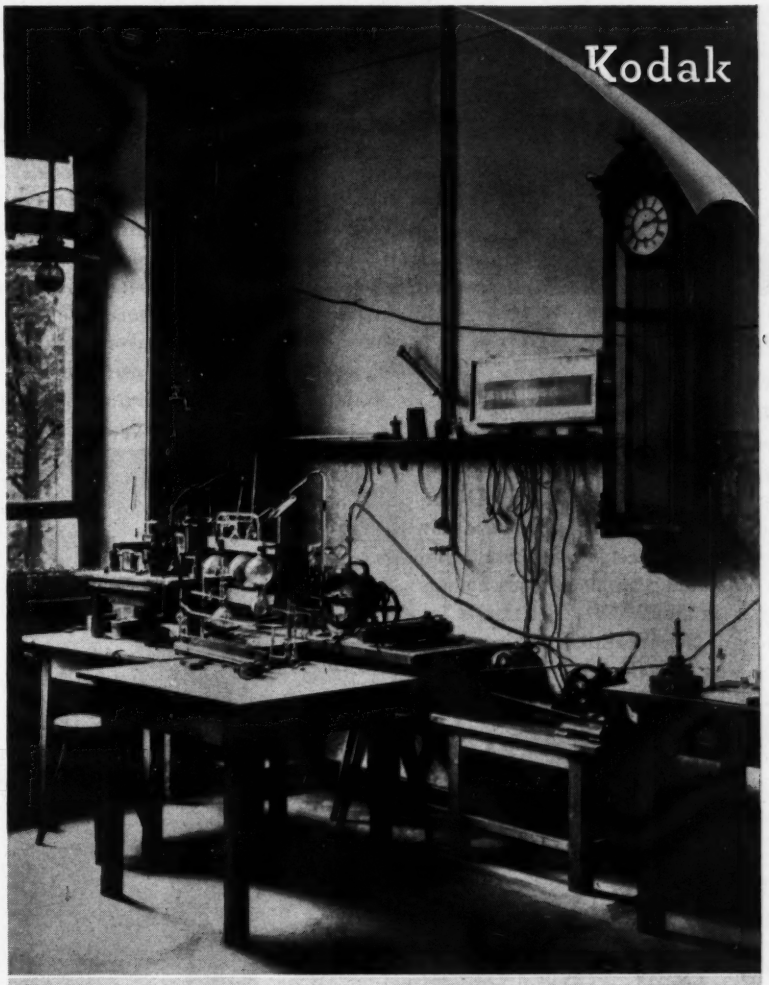


PHOTO FROM COLLECTION OF OTTO GLASSER, PH.D.

HERE ROENTGEN DISCOVERED THE X-RAY...1895

IN THIS SMALL LABORATORY at the University of Würzburg, Germany, late in the evening of Friday, November 8, 1895, Professor Wilhelm Conrad Roentgen unexpectedly and dramatically discovered the x-ray. Professor Roentgen at that astounding moment little realized what a brilliant beacon to human progress would be the dull glow which suddenly shimmered across the fluorescent screen that lay on the table before him. ★ ★ ★ The association of Kodak products with radiology began when general interest in the x-ray was first manifest. Through the years, endless innovation and improvement have firmly established the Kodak Company as the world's leading manufacturer of quality radiographic materials.

EASTMAN KODAK COMPANY
Medical Division, Rochester 4, N. Y.

Contra-Angles

"No Farewell to Teeth" . . .

With this flamboyant headline, *The American Weekly* announces that a tooth may be removed, the infected part cut away, the tooth treated with penicillin and then replanted. The article indicates that the procedure may be done in "selected cases" and hedges by quoting an anonymous authority from the First District Dental Society of New York: "There is no reason why a tooth, treated in this way, should not take hold. It would regenerate. Whether the regeneration would be satisfactory for six days, or six months, or six years, is problematical."

A good many dentists have blind faith in the efficacy of publicity. These men are constantly talking about making the American people "dental conscious," and mention the need for extensive and expensive dental health publicity. No one can take exception to good and carefully controlled dental information to the public. Premature, inaccurate, or poorly slanted publicity is worse than none. We all have known the embarrassment that comes from such stories as those describing the ill-starred Hartman's solution, the furor over the recent air-abrasive method of cavity preparation, the unsubstantiated promises made to the people regarding the protective power of the fluoride ion in communal drinking water. Now we may expect people to demand that their teeth be extracted, treated with the miracle drug, penicillin, and replanted. There always have been a few cases where replantation following accidental tooth loss was successful. They are extremely few and likely will continue to be so despite any

Others Have Tried BS POLISHERS Why Not You?

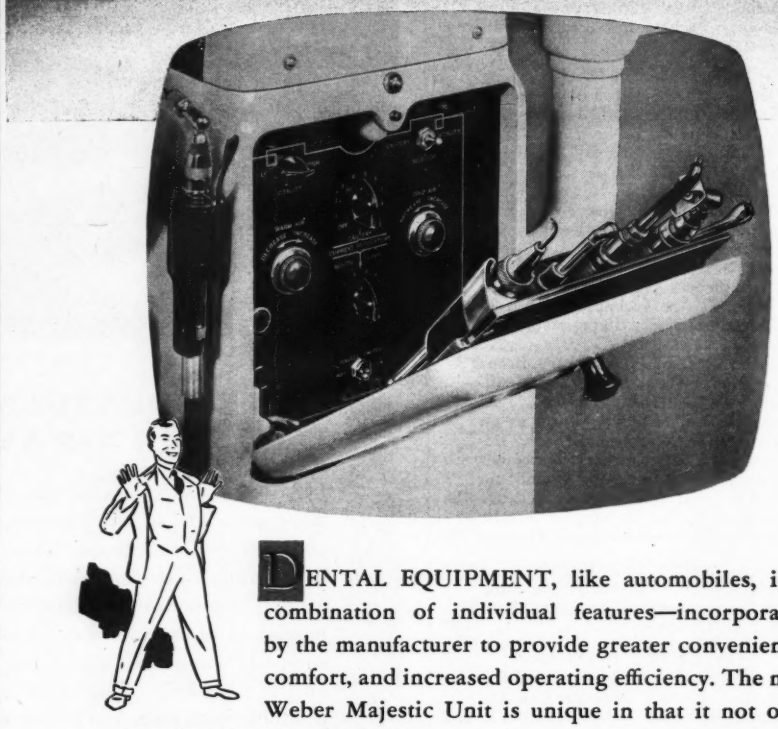
Many dentists have sent in the coupon below and found out why BS Polishers are preferred over many others. They can readily understand why this soft, flexible rubber polisher makes a patient feel safe and comfortable, also why it is easy for it to clean and polish every tooth to a lustre brightness. Why don't you find out these facts for yourself? Send the coupon in now!

BS POLISHERS ARE SMALLER AND MORE CONVENIENT TO USE

Young Dental Mfg. Co.
St. Louis 8, Mo.
Gentlemen:
Without any obligation send us one of your BS POLISHERS — ABSOLUTELY FREE.

NAME .....
ADDRESS .....
CITY .....
STATE .....

Pardon U



DENTAL EQUIPMENT, like automobiles, is a combination of individual features—incorporated by the manufacturer to provide greater convenience, comfort, and increased operating efficiency. The new Weber Majestic Unit is unique in that it not only embodies the "standard" features of other unit equipment—but many additional innovations which are *exclusively* Weber. Some are visible to the eye—such as the ingenious disappearing Instrument and Control Panel and the "Swinging Bowl Arm" Cuspidor. Others, unseen but just as important are the "built-in" features of quality which insure lasting efficiency and years of dependable service.

Yes, here is Unit Equipment at its very best . . . designed with an eye to beauty as well as efficiency. So before you invest—*investigate Weber!*

WEBER DENTAL MFG. CO. • CANTON 5, OHIO

antibiotics that so far have been produced.

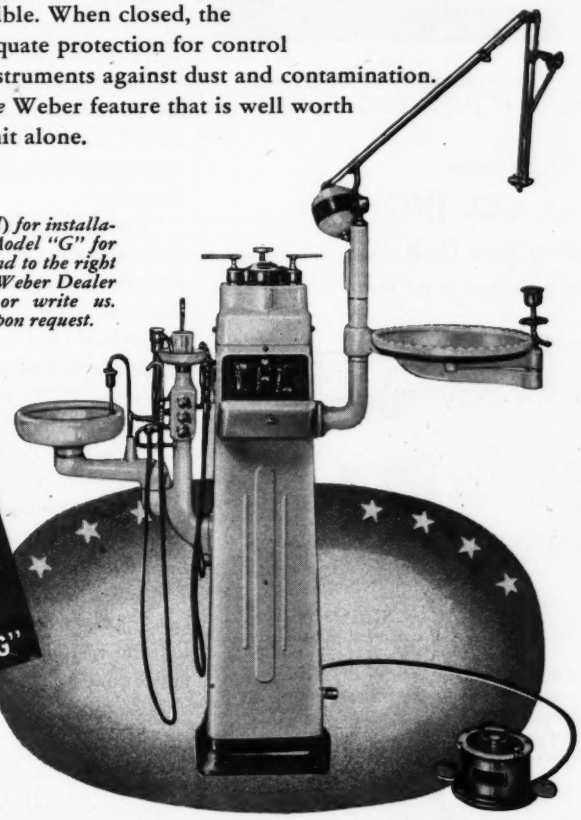
The American Medical Association, no shrinking violet in matters of publicity, has wisely warned of some of the dangers of poorly timed stories in the public press. Under the title, PUBLICITY FOR SCIENTIFIC MEDICINE, *The Journal of the American Medical Association* carries this comment:

"Publicity for new discoveries in the field of medicine is a two-edged sword. It may extend the hopes of the public far beyond what is warranted. It may cause pressure on physicians to try methods of treatment that may not be desirable. On the other hand, the public is certainly entitled to know about new discoveries in medicine and their significance in relation to the maintenance of health and the prevention of disease. Recently the periodical *Nordisk Medicin* has developed a special technique in relation to the scientific medical articles that it publishes with a view to solving this problem. When an article is undesirable or unready for public ex-

While We Boast A Little...

THE instrument door and control panel which is a major feature of the new Weber Majestic Unit is probably one of the greatest single contributions to over-all operating efficiency ever offered in a dental unit. Open the door and a complete group of efficiently-arranged low-voltage instruments is *automatically* projected within easy reach from any operating position . . . ready for instant use—yet never in the way! The control panel for regulating all air and electrical appliances is also readily accessible. When closed, the door provides adequate protection for control mechanism and instruments against dust and contamination. Here is an *exclusive* Weber feature that is well worth the price of the Unit alone.

Model "F" (illustrated) for installation to left of chair. Model "G" for installation forward and to the right of the chair. Ask your Weber Dealer for full particulars or write us. Literature available upon request.



WEBER *Majestic* UNITS
Models "F" and "G"

• Better to claim too little than too much in advertising. The dentist who finds a product superior to its claims is more firmly sold than one who finds that it will not do all of the many things (some unimportant) that are boastfully claimed for it. These are reasons why each passing year finds more dentists who use only Ames Cements. The W. V-B Ames Company, Fremont, Ohio.

AMES
Dental Cements

AMMONIACAL SILVER NITRATE and FORMALIN

(Howe)

Always Fresh in Ampoules

A standard drug in dental therapeutics, providing a simple method for control of dental caries.

The chemicals used in this compound are of the highest quality in purity and uniformity. The solution in every ampoule has been given a chemical analysis. You may rely upon the contents in ampoules being a definite uniform chemical compound.

After opening, an ampoule may be tightly sealed and will retain its chemical balance and metallic silver content until the last drop is used.

P. N. CONDIT
Box 204, Back Bay, Boston 17, Mass.
Without obligation send me your new illustrated booklet.

Name .....

Address .....

City and State .....

YOU CAN'T MISS

when you use these

TWIN PRODUCTS

Better results have been obtained with

OPOTOW IMPRESSION PASTE

Now another difficult step is taken care of properly with

OPOTOW PERIPHERAL PASTE

BECAUSE Opotow Peripheral Paste has the necessary physical properties . . . entire peripheral border can be obtained in one insertion. Over- or under-extension and over-compression of tissue is eliminated.

A PERFECT Peripheral Border—Taken with OPOTOW PERIPHERAL PASTE

Same Impression, Completed with OPOTOW IMPRESSION PASTE

Order Now, Through Your Dealer

INTERSTATE DENTAL CO. INC.

220 West 42nd Street New York 18, N. Y.

For Further Particulars, Mail the Coupon in the Back of the Book.

The Bosworth
Winglite
Presents Wing Bite X-Rays to the Greatest Advantage
Place the WINGLITE in your patients' hands so they easily can see the Bite-Wings with the little red arrows on them indicating necessary dental work. You will then have CREATED INTEREST, SECURED ATTENTION, and EDUCATED YOUR PATIENT in all necessary steps to obtain DESIRED ACTION. This helpful, compact, streamlined WINGLITE, TESTED in every day use, is modestly priced at $7.00.
HARRY J. BOSWORTH CO.
1315 SO. MICHIGAN AVE. CHICAGO

ploitation, the editors place at the top of the article as published in the medical journal the phrase 'Omtale i dagspressen forbydes.' This means that reproduction in the daily press is forbidden. Since the material in the publication is covered by controls, as our periodicals are covered by copyright law, this would seem to serve the purpose of delaying publicity for scientific contributions until the medical profession itself considers such publicity warranted."

In some quarters this sound warning of the American Medical Association will be labeled as a threat to the freedom of the press. It is nothing of the sort. It is an effort to withhold information until it has been critically examined and has stood the test of practice and of time. It is disservice to arouse the hopes of the public before we are prepared to fulfill the promise.

"Men Who Endured" . . .

This is another example of publicity misdirected. An editorial writer in *The Norfolk Ledger-Dispatch* has attempted to show that the services rendered by the Army Dental Corps were not in the public interest. This editorial is a horrible example of ambivalence, which is a fancy way of saying "going two ways at once." The first two paragraphs are factually correct and give a fair evaluation of the services performed by the Army Dental Corps. The last two paragraphs are gross distortions. You be the judge!

"The Army's chief dentist, Major General Robert H. Mills, has provided some interesting statistics on the treatment afforded American soldiers. Since Pearl Harbor, he reports, Army dentists have pulled 16,500,000 teeth, and filled 71,700,000 others. In the same period the Army's dental forces have provided 2,600,000 sets of false teeth for soldiers.

"A first reaction to the figures is satisfaction that American soldiers have had such extensive dental care. Too much cannot be said for proper care of the teeth. The figures reveal that the average soldier had two teeth pulled and four filled, and that a set of false teeth was provided for one in

JUSTI RESEARCH Suggests:

Packing many clear palates at once was a problem in a large laboratory—solved as follows—

a. Mix one unit clear at a time.

b. Work on only two cases at once.

c. Pack clear when mix is ready—pack pink cases in between clear cases.

T-3 Clear is optically clear—used on acrylic eyes—contact lenses. Few failures due to—

a. Porosity—not test packed—or too soft to test pack. Temperature over 158° for first hour.

b. Dull—lead foil used instead of tinfoil, cellophane.

c. Bleach—dope in monomer, vulcanization.

e. Bleeding through pink—pink too soft—clear too hard.

ACRYNAMEL Liquid Opaque—the perfect answer to covering gold work—may be painted on before wax-up and boiled out.

ACRYNAMEL Liquid Opaque may also be applied to inside of thin jackets before cementing. Send for literature.

For those who question the wear of acrylic teeth—an original case over five years old—against lower natural teeth—is still in use! Their natural wear keeps them in balance.

Wear is important. It should exist, the same as in natural teeth. It maintains denture balance and stability for the useful life of the denture.

THE

HARDER

DENTA PEARL

Cyclo-Mold

PLASTIC TEETH

IS BALANCED OCCLUSION AFFECTED BY ALVEOLAR CHANGES?

Yes! Balanced occlusion is maintained only when alveolar changes are minimized by resilient occlusal impact and equalized by slight denture tooth wear — the same as in human teeth. DENTA PEARL "Cyclo-Mold" Plastic Teeth, despite their increased hardness, do both — thus maintaining balanced occlusion throughout the useful life of the denture! No other teeth . . . no articulator . . . no prosthodontist can equal this accuracy.

DENTA PEARL *Cyclo-Mold* PLASTIC TEETH

UNCONDITIONALLY RECOMMENDED FOR **FULL DENTURES** AND ALL PROSTHETIC CASES

H. D. JUSTI & SON, INC., PHILADELPHIA 4, PA. RELIABLE DENTAL PRODUCTS SINCE 1864

four. This would seem to be quite an achievement on the part of the Army dentists. Its meaning in terms of the men's health can be readily found by those who are accustomed to probe for the meanings in such situations.

"But a sharper reaction is one of shock. For these figures mean that during the war period American soldiers suffered the filling of 71,700,000 teeth. At the normal civilian rate this would represent 35,850,000 hours or 1,493,750 days of grinding and gouging and the horror that goes with it. It would be as if 1,493,750 American soldiers were sentenced to spend a full twenty-four-hour day in the dentist's chair.

"Looking on this record one realizes that not all the suffering by American fighting men was on the beaches or in the foxholes, or in the ships on sea and in the air, or in the enemies' torture camps. Think, for a moment, of 71,700,000 tooth fillings. It is a wonder that the Japanese, with their keen sense for torture, didn't think of some project like this."

This is Better . . .

In the annals of journalism in the professional field, no writing is more direct or honest, nor reflects more the eloquency of simple style than a report by the late Doctor Allan Roy Dafoe describing the birth of the Dionne quintuplets. Here are several paragraphs from this warm, human document of pure literature:

"At 4:00 a.m., May 28, 1934, a 'hurry call' came from the Dionne home. I arrived to find the home in confusion, no preparation made for confinement, except a tea-kettle boiling on the stove. Two babies had already been born, and a third was just making its appearance over the perineum. Two neighbors were acting as midwives. The father had disappeared. I scrubbed up in the best way available, took over the situation, and delivered the third baby. The neighbors then scurried around the house to get some wrappings for the babies and replenish the fire. In the meantime, another amniotic sac was presenting itself at the vaginal orifice and a little pressure over the abdomen brought another baby into the world. This one was followed by still another. The last two babies were born within intact amniotic sacs and could be seen moving their arms and legs through the transparent walls.

"In the early hours of the morning and still sleepy from a previous obstetric case that night, the whole situation seemed to be unreal and dreamlike, but I mechanically went about the business of looking after the babies. I tied the cords of the second two. The first cord had already been looked after by the midwife and tied off with ordinary twisted thread from a spool. When the babies were breathing and whimpering, I ruptured the sacs of the last two and carried out the same procedure with them. The three larger babies were born first and the two smaller ones last, but the exact order of birth sequence is not known. All the babies by this time were breathing and crying fairly vigorously for their size. I didn't see

how all the babies could possibly live, so I baptized them separately. They were then wrapped in the only covering available, which proved to be remnants of cotton sheeting and old napkins, and then laid on the corner of the bed and covered with a heated blanket.

"My attention was then centered on the mother, as she suddenly went into a condition of shock. There was very little external bleeding, but the uterus was large and flabby, the patient was cold, and the radial pulse had disappeared. The fundus was gently massaged, and solutions of pituitary and ergot were given. In a short time the pulse picked up a little but was still fast and weak. Slight color appeared in her face and the uterus hardened. In about twenty minutes from the birth of the last baby, the five cords descended and the uterus rose in the abdomen. With gentle pressure from above and guidance from below, the placenta was delivered. It was accompanied by a considerable amount of blood. The patient was then covered with blankets and the fundus held. Two hours later she was definitely out of danger."

If more of us who write in the scientific publications and those who write for public reading were to adopt the directness and the humility of Doctor Dafoe, we could expect more widespread acceptance. A case report, the facts of a scientific experiment, the description of a technique, are always more effective when they are stated simply, concrete and specific in reference, and free from pomposity in thought and style.—E. J. R.

LONGER WORKING TIME

Acralite denture acrylic is scientifically fabricated to afford longer working time for packing into the flask. It maintains its plasticity for a more extended period; thus many cases may be packed with a single mix.

You can depend upon the uniform character of Acralite denture acrylic — upon its strength, color stability and adaptability. It is made under rigid supervision and control and is certified to meet A. D. A. Specification No. 12. That's why hundreds of thousands of efficient and natural-looking Acralite dentures are in daily use — years after they were made! *For Dentures of Distinction — Standardize on Acralite.*

ACRALITE CO. INC. • 230 WEST 41st STREET • NEW YORK 18, N. Y.

TRY LAVORIS

It's Different —Thorough

It coagulates and clears away offensive matter

Similarity of Mouth and Vulvar Lesions

Parks, in the *American Journal of Obstetrics and Gynecology* for March 1945, observed that there is a structural embryologic-anatomic and physiologic similarity between the mucosa of the mouth and the vulva. Certain local and systemic infections influence both areas. Women frequently consult the dentist or the physician early about mouth lesions, but they are reluctant to seek advice at the onset of genital symptoms.

Physiologic Similarities

1. The vestibule of the mouth and the vestibule of the vulva are quite similar in regard to temperature, alkalinity, degree of anoxia, and texture.

2. With nasal breathing there is little more oxygen in the mouth than is ordinarily present in the vulvovaginal area.

3. The lips and labia minora are particularly well supplied with nerves, blood and lymph vessels.

4. With few exceptions, systemic factors influencing circulation to the mucosa of the mouth and vulvovaginal area cause similar color changes.

Symptom Similarities

Premenstrual—1. Systemic premenstrual vascular changes bring about submucosal engorgement and redness in the mouth.

2. Premenstrual edema of the lips, face, and vulva occasionally occurs.

3. Cyclic endocrine changes influencing the oral mucosa may give rise to hyperemia and bleeding of the gingivae in association with menstruation.

Pregnancy—1. Oral changes associated with pregnancy are those of hypersecretion and tissue proliferation.

2. Marginal gingivitis, ptyalism, and benign tumors, may appear during pregnancy.

3. The smooth tongue and pale buccal mucosa of the last trimester of pregnancy usually are associated with hypochromic anemia.

Menopausal — 1. The atrophic menopausal changes in the mucosa of the mouth and vulva are glazed and much less resistant to infection.

2. Older women complain of dryness and burning of the mouth and of irritation of the vulva.

3. Estrogenic therapy will give relief of symptoms in both areas. Resistance to mouth and vulvar infections is heightened by activation of the mucosa with estrogens.

Anemia—1. Bald atrophic tongue, ulceration of the lips and buccal mucosa, and superficial ulceration of the vulva, occur in severe relapses of pernicious anemia, along with hyperpigmentation of the surrounding skin. Evidence points to the combination of achlorhydria and vitamin B deficiency as the cause.

2. Stomatitis and vulvitis are manifested in aplastic anemia and in leukemia by bleeding gingival margins and ulcerations of the oral and vulvar mucosa, with frequent infections by fusospirochetal organisms.

Syphilis—1. The most serious systemic disease common to the vulvar and oral mucosa is syphilis.

The Patrician of Casting Golds

JELENKO NO. 7
CAST GOLD
REG U. S. PAT OFF

ITS UNFAILING PERFORMANCE IS GUARDED BY OUR ETERNAL VIGILANCE IN MANUFACTURE

The Test Number on every Jelenko Gold Envelope is the key to the history of that piece of gold from Melting Pot to the final Physical Properties Test.

for 1-Piece Cast Partials, Clasps, Bars, Saddles, etc.

GOLD COLOR per dwt. $2.00

THE exceptional physical properties of "Jelenko No. 7 Cast Gold" give it the maximum strength, flexibility and hardness obtainable in a workable gold colored casting gold. It can be cast thin and light.

High resistance to mouth discoloration.

Sold by Better Dealers Everywhere

J.F. Jelenko & Co., Inc.
Manufacturers of Dental Golds & Specialties
136 West 52nd. Street New York 19. U.S.A.

Send Your Scrap to Jelenko. Accurate Assay; Prompt Report.

2. Leukoplakia, a symptom of syphilis, is found in both areas.

3. Breaks in the mucosa are not necessary for inoculation with *Treponema pallidum*.

4. Hutchinsonian teeth and rhagades are evidence of congenital syphilis.

Stomatitis—1. In diabetic stomatitis and vulvitis, the mucosa of the mouth and the vulva is dry, parched, and deep red in color, with burning sensations.

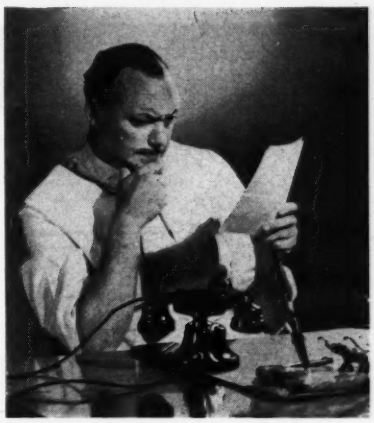
2. In uremic stomatitis the discharges from the edematous and ulcerated areas in the mouth and vulva have a uriniferous odor.

Deficiency States—1. The tongue is an indicator of dehydration and malnutrition.

2. Changes in the dorsum of the tongue, the buccal mucosa, and the lips, often reflect vitamin deficiencies secondary to gastroenteric and febrile diseases.

3. An adequate diet supplemented with nicotinic acid and brewers' yeast will initiate tissue repair of both oral and vulvar lesions caused by B2 and

(*Continued on page* 724)



REPORTS FROM THE HOME FRONT

DENTISTS SHOWING MARKED PREFERENCE

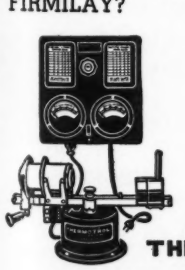
JELENKO "FIRMILAY" TYPE C ABUTMENT

GOLD DUE EASY BURNISHABILITY

THIS increasing preference for FIRMILAY is quite understandable. It's a CERTIFIED Type C Inlay Gold, possessing the Strength and Hardness required to meet A.D.A. Specification No. 5 for Type C Golds; yet is almost as easily burnished as a Type B Gold. *A rare combination.*

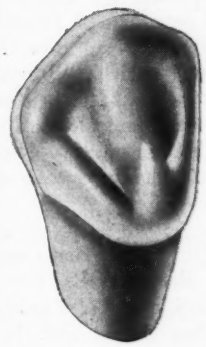
In practice this combination means that FIRMILAY Crown or Inlay Abutments will stand up well under heavy occlusal loads and abrasion and that their margins can be drawn to a feather-edge without breaking or chipping.

May we suggest that you, too, try FIRMILAY?



SOLD BY BETTER DEALERS EVERYWHERE

Cast by JELENKO THERMOTROL



FIRMILAY

REG. U.S. PAT. OFF.

TYPE C-HARD

for all Crown and Inlay Abutments

Gold Color per Dwt. $2.00

Certified to Meet A.D.A. Specification No. 5

Send Your Scrap to Jelenko; Accurate Assay, Prompt Report

J. F. Jelenko & Co., Inc.

Manufacturers of Dental Golds & Specialties

136 West 52nd Street · New York 19, U. S. A.

Have YOU ever examined your TIME LOSSES?

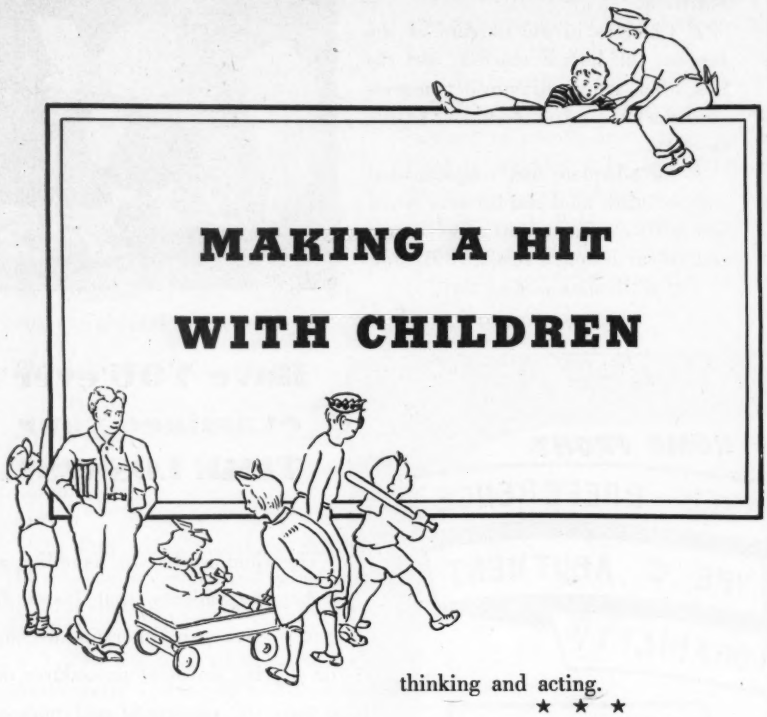
The time wasted in handling apprehensive patients, time losses due to operative pain interruptions, and the slowing down of procedures due to patients' sensitivity and nervousness involve only minutes in each instance, but over a period of time they combine to seriously reduce productive time. McKesson nitrous oxide pain control saves time and energy for both operator and patient. By controlling operative pain, time losses due to pain interruptions are avoided. By allaying apprehensiveness, chair time is conserved.

It will involve no obligation to let us tell you how McKesson nitrous oxide equipment can help you increase your productive time, conserve your energy and build patient goodwill and cooperation.

NARGRAF THE McKESSON APPLIANCE CO. N_2O McKESSON O_2 TOLEDO O. U.S.A. EUTHESOR

EASOR

In your ORAL HYGIENE this month



Do you dread treating children? Doctor Robert W. Fischer tells you how to overcome your own, and their, reluctance. In his article, "Making a Hit with Children" (page 2102 of the December issue of Oral Hygiene), he claims that "operating on a well-trained child patient can be faster than on an adult" and that "it can be profitable, stimulating, challenging, gratifying, and lots of fun."

★ ★ ★

To merge—or submerge? Columbia University is combining its school of dentistry with its school of medicine. An article (page 2106) gives the details of the Columbia plan, under the title, "Columbia, the Gem of Discord."

★ ★ ★

"Army Medical Department Investigated" . . . Remarks made by Colonel William P. Holbrook (MC) AAF before the Committee on Military Affairs . . . and a plea for a congressional investigation into the Army and Navy Dental Corps administrative organization. The article on page 2110 is full of food for thought. Let's hope the right people begin thinking and acting.

★ ★ ★

Have you any peculiarities of professional personality? Probably not, but, just to check up, turn to Doctor S. J. Levy's article, "Between Ourselves," on page 2116. It is an amusing account of some dentists' amazing practice habits, and how these habits affect the financial success of their practices.

★ ★ ★

"My Life in a Prison Camp" . . . Captain Benedict B. Kimmelman (DC) AUS, has been awarded the Bronze Star Medal and the Silver Star in recognition of his outstanding military service. Captain Kimmelman does not write about his bravery and gallantry in action (for which he received the decorations), but of his experiences while a prisoner in Germany giving dental treatment to other prisoners in Stalag IVB.

★ ★ ★

Don't forget the regular monthly departments. Nine of them are waiting for your spare-moment reading, with everything from philosophy and technical problems to quiz questions and humor—a section for every mood.

(*Continued from page 723*)

riboflavin deficiency.

Other Symptom Similarities—1. Thrush, or moniliasis, is one of the most common infections of the oral and vulvovaginal mucosa. It will thrive only on mucosa subjected to trauma or lowered resistance.

2. Psoriasis, herpes simplex, lichen planus, and impetigo, as well as diptheria, tuberculosis, chancroid, and gonorrhea, may affect either the mouth or vulva.

3. Vincent's fusospirilla are common secondary invaders of vulvar ulcerations just as they are of lesions in the mouth.

—From *The New York Journal of Dentistry* 15:324 (November) 1945.

Advertising Index

Acralite Co., Inc. 720-721
Ames Co., The W. V-B 717
Austenal Laboratories, Inc. ... 714
Bosworth Co., Harry J. 718
Bristol-Myers Co. 705
Castle Co., Wilmot 726
Caulk Co., L. D. 725
Clark-Cleveland, Inc. 676
Columbia Dentoform Corp. ... 706
Columbus Dental Mfg. Co. 677
Condit, P. N. 717
Cook-Waite Laboratories, Inc. 704, 713
Corega Chemical Co. 728
Dentists' Supply Co., The ..4th cover
Eastman Kodak Co. 715
Hudson Products, Inc. ....3rd cover
Hygienic Dental Rubber Co. .. 708
Interstate Dental Co., Inc. 718
Jelenko & Co., Inc., J. F. 722-23
Justi & Son, Inc., H. D. 719
Konformax Laboratories, Inc. .. 670
Lavoris Company, The 721
McKesson Appliance Co. 723
Mu-Col Company, The 706
Polident Co. .....3rd cover
Professional Printing Co. 703
Pycope, Inc. 671
Smith & Son Mfg. Co., Lee S. .. 708
Squibb & Sons, E. R. 707
Universal Dental Co. ....2nd cover
Vernon-Benshoff Co. 672-73
Warren-Teed Products Co. 678
Weber Dental Mfg. Co. 716-717
Wernet Dental Mfg. Co. 674-75, 727
Williams Gold Refining Co. ... 669
Wilmot Castle Co. 726
Young Dental Mfg. Co. 716

MAKE "INSTRUCTIONS" PAY WITH *Py-co-pay*

USE THIS *NEW* PROFESSIONAL COMBINATION PACKAGE

● Progressive dentists everywhere will appreciate the significance of this new Py-co-pay Combination! Used as an adjunct to oral hygiene instructions, Py-co-pay will—

1. Doubly emphasize the importance of proper oral cleansing equipment.
2. Help the patient remember his dentist's instructions... remember his dentist.
3. Serve as a daily reminder to visit his dentist regularly.

A supply of the new Py-co-pay Professional Combination Kits can be shipped to you without delay. Simply indicate the quantity you desire on the coupon below. Start making your "instructions" pay —with Py-co-pay!

ADULT SIZE

Includes $.50 Size Py-co-pay Brush, and $.50 Size Py-co-pay Powder.

per doz. $2.50 • *per gross* $25.00

JUNIOR SIZE

Includes Junior Py-co-pay Brush and Professional Trial Package Py-co-pay Powder.

per doz. $1.30 • *per gross* $12.50

ENCLOSE BUSINESS CARD OR LETTERHEAD

15M

PYCOPE, INC., 2 High Street, Jersey City 6, N. J.

☐ C.O.D.
☐ Check enclosed

Please ship ____doz. Py-co-pay ADULT SIZE Professional Combination Packages with Nylon No. 1 Medium____ No. 2 Hard____ No. 3 Extra Hard____; or Natural (Extra Hard)____ *(Specify texture of brush in Adult Size Packages)*

____doz. JUNIOR SIZE Packages.

Dr._____

Address_____ City_____ State_____

Dimensional

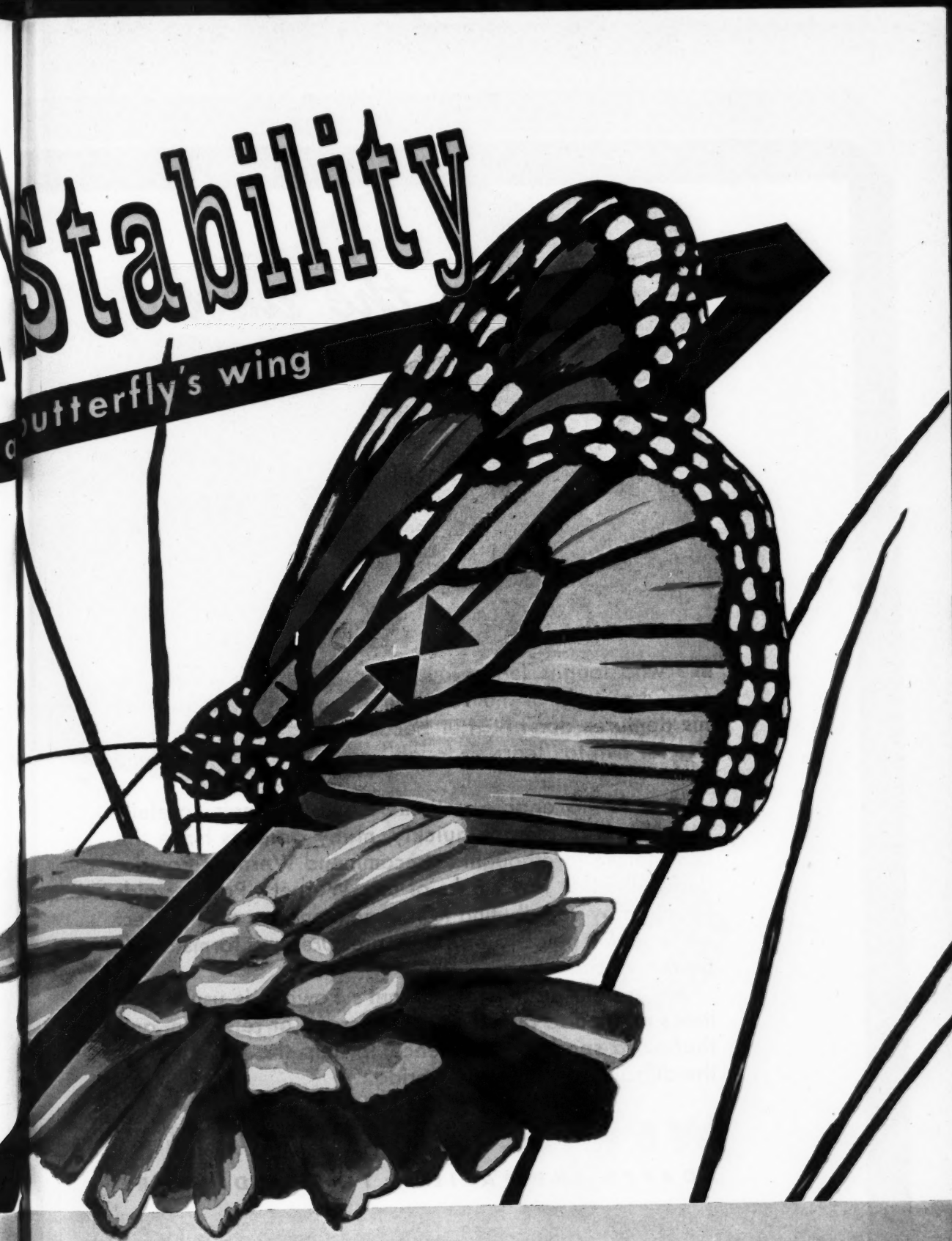
Less change than the thickness of a

Once molded, a properly constructed Vernonite denture *stays* the same *size* and *shape.* Careful investigations in our research laboratories and scientific measurements of cases worn in the mouth for a period of years lead to the conclusion that Vernonite has an extremely high degree of dimensional stability. This outstanding acrylic material remains accurate to about 0.1% linearly.

Compared to the average span of a denture, 50 mm, this means that the actual change in Vernonite, while being worn in the mouth over long periods, is less than the thickness of a butterfly's wing, less than the thickness of a human hair, a silk thread, or the paper this statement is printed on.

For assured functional perfection in the mouths of your patients, for dependable comfort in the years ahead, make it a point to specify Vernonite for full and partial restorations. Safeguard your patients' oral happiness and your own peace of mind by accepting no substitute.

Vernonite



VERNON-BENSHOFF CO., P. O. BOX 1587, PITTSBURGH 30, PENNA.

Speed the ability

TO LAUGH

"He who laughs *least*—laughs best"... is too often the fearful attitude of the new-denture patient. Not because his dentures don't fit—but because it takes a little practice for him to "learn to laugh" again, with freedom and confidence.

In order to enable patients to master their carefully fitted dentures more quickly, many dentists have the considerate forethought to recommend Wernet's Powder during the first few weeks of use. Wernet's Powder aids retention by contributing to the maintenance of a *perfect valve seal*. It helps to *distribute pressure*, and forms a *soft protective cushion*.

Just a light dusting of Wernet's Powder is usually all that's needed to give that *extra* degree of retention, and that *extra* spark of confidence, to help the patient over the difficult "breaking-in" period.

WERNET'S POWDER

ADAPTS THE PATIENT TO THE DENTURE

FREE SUPPLY on Request

WERNET DENTAL MFG. CO.
190 Baldwin Ave., Jersey City 6, N. J.

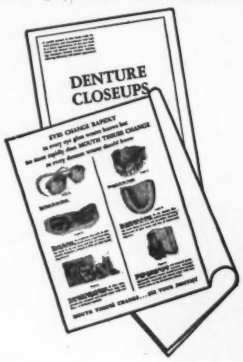
Dept. 15-M.

DENTURE PATIENTS DON'T COME BACK

A recent survey shows that only 33.2% of all denture wearers ever find their way back to a dental office. Apparently, when normal resorption occurs patients do not realize that this condition demands their dentists' assistance.

Many dentists believe that adequate instruction at the chair will eventually correct this attitude. In the belief that pictures speak stronger than words the brochure "Denture Closeups" was developed. It describes graphically the story of tissue resorption and "when mouth tissues change—see your dentist."

Write for your free copy of "Denture Closeups" today.



CLARK-CLEVELAND, INC., Binghamton, N.Y.

FASTEETH
Alkaline DENTURE POWDER

Still Available

COGSWELL'S

"DENTAL ORAL SURGERY"

A text book for the general practitioner . . . and for the man who specializes. Price, $10.

Through your dealer, or direct

THE DENTAL DIGEST 1005 Liberty Ave. Pittsburgh 22, Pa.

THE DENTAL *Digest*

PUBLICATION OFFICE:
1005 LIBERTY AVENUE
PITTSBURGH 22, PENNSYLVANIA

MERWIN B. MASSOL.....*Publisher*
ROBERT C. KETTERER *Publication Manager*
W. EARLE CRAIG, D.D.S.....*Associate*
S. M. STANLEY *Vice Pres.-Eastern Manager*
JOHN J. DOWNES.....*Western Manager*
DON HARWAY.....*Pacific Coast Manager*
DOROTHY STERLING....*Promotion Manager*
ELIZABETH BOYLE....*Circulation Manager*

•

EDITORIAL OFFICE:
708 CHURCH STREET
EVANSTON, ILLINOIS

EDWARD J. RYAN, B.S., D.D.S...*Editor*
ETHEL H. DAVIS, A.B.....*Assistant Editor*
(In Military Service)
RUTH K. BARNHART.....*Assistant Editor*

•

Manuscripts and editorial correspondence should be addressed to the Editorial Office.

•

SUBSCRIPTIONS—In the United States, Alaska, Canada, Cuba, Hawaiian Islands, Mexico, Philippines, Puerto Rico, Central and South America: One year, $3; two years, $4.50; three years, $6. Three-year subscription includes *Visual Education in Dentistry*. (See below.) Elsewhere: One year, $3.75; two years, $6.50; three years, $8.25. Subscriptions payable in advance.

•

ADDRESS CHANGES—Please allow two weeks for address changes to become effective; furnish old as well as new address.

•

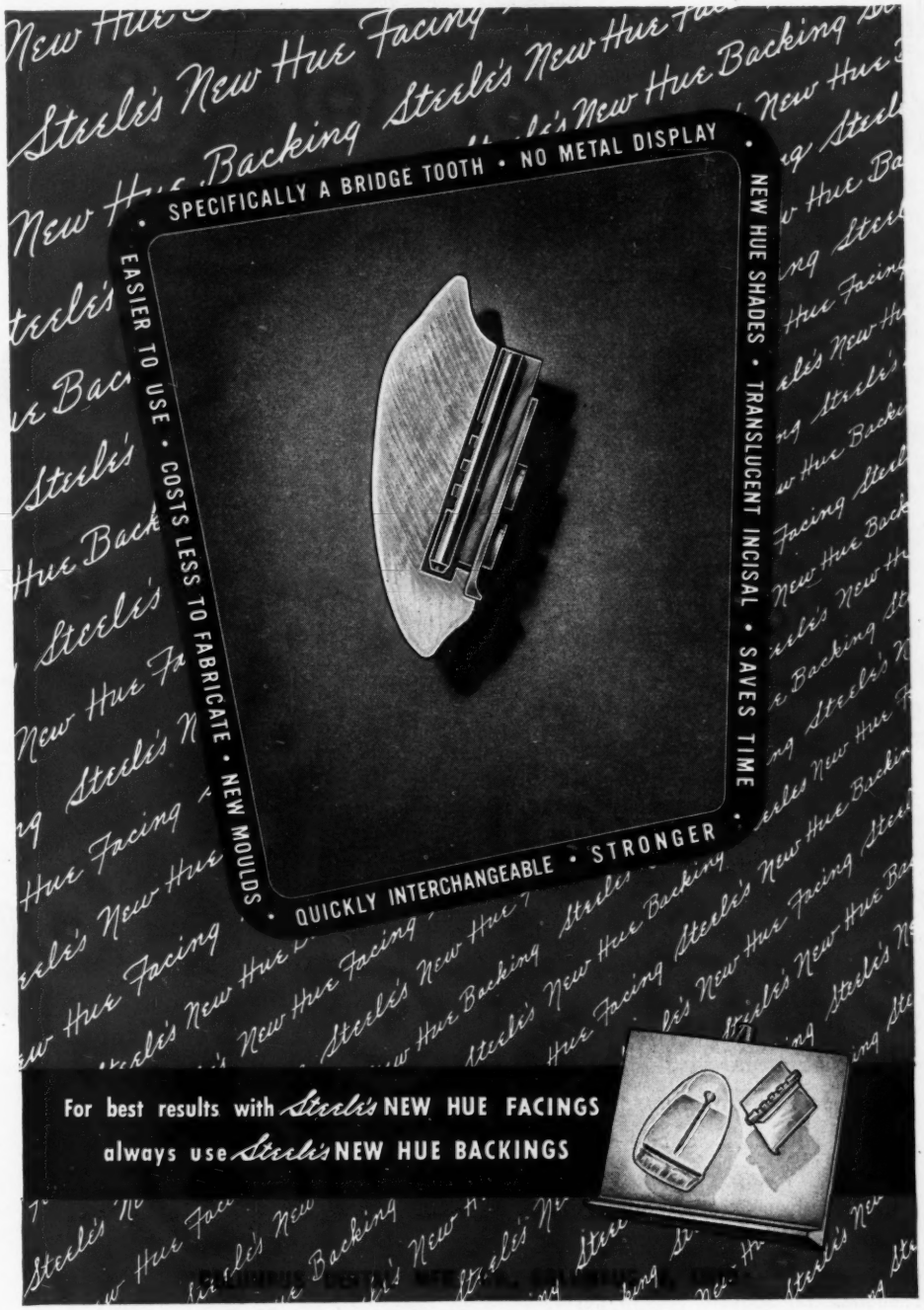
PUBLICATION DATE—The magazine is mailed on the fifteenth of month of issue.

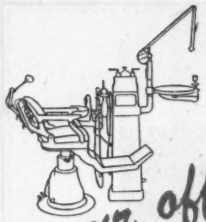
•

EXTENSION SERVICES—*Visual Education in Dentistry*, printed in full color, in DENTAL DIGEST page size. Includes 30 charts from the series, *Visual Education in Dentistry*. Prices: $1 per copy to DENTAL DIGEST subscribers; $2 per copy to non-subscribers; $1 per copy with new subscriptions at the rates named above. *Ryan Examination and Treatment Records*, carrying an anatomically accurate chart with space for examination data, lithographed on durable paper of proper texture for crayon, pencil, or ink. Price: $1 per pad of 50, punched for standard loose-leaf binder. *The Castle That Was Destroyed* (published in May, 1939). Prices: 100, $6.50; 200, $10; additional 100's, $3; *Your Teeth and Your Life* booklet. Prices: 25, $1; 100, $3. *Clinics on Paper* booklet. Includes 100 suggestions from "Clinical and Laboratory Suggestions" department; 64 pages. Price: $1 to DENTAL DIGEST subscribers; $2 to non-subscribers. Information or request.

•

DISTRICT ADVERTISING OFFICES—*New York*, 7 East 42d Street; *Chicago*, Peoples Gas Building; *St. Louis*, Syndicate Trust Building; *Los Angeles*, 816 West 5th Street; *San Francisco*, 1105 Russ Building.


SPECIFICALLY A BRIDGE TOOTH • NO METAL DISPLAY
NEW HUE SHADES • TRANSLUCENT INCISAL • SAVES TIME
QUICKLY INTERCHANGEABLE • STRONGER
EASIER TO USE • COSTS LESS TO FABRICATE • NEW MOULDS
For best results with Steele's NEW HUE FACINGS
always use Steele's NEW HUE BACKINGS



In your office—

At patients' homes

1000 CT. WARREN-TEED M-185
AXOTAL
CAUTION: To be used only on the prescription of a physician.
WARNING: Irreparable damage may result from the use of these tablets unless used under constant supervision of a physician.
KEEP TIGHTLY STOPPERED AND PROTECTED FROM LIGHT.
THE WARREN-TEED PRODUCTS
COLUMBUS 8, OHIO

WARREN-TEED AXOTAL TABLETS

Assure Post-Operative Pain Relief

You owe it to your patients — sustained relief from post-operative pain. Assure it by giving Warren-Teed Axotal tablets in your office—see that your patients receive some for later use at home. Axotal's balance of ingredients allays nervous excitability without causing drowsiness, relieves post-operative pain.

Solve Dental Cleaning Problems With
WARREN-TEED PUMICE PASTE

Fine grade for teeth easy to clean—Coarse for difficult cases. Each grade in pleasantly flavored special adhesive base to minimize flying particles.

WARREN-TEED DENTAL PREPARATIONS

For Pain and Sedation—Axotal, Axene, PENTObarbital Sodium wafers and capsules, Phenobarbital Sodium. *Anesthetics*—Benzo-Form, Iso-Synecaine, Quin-R-Cain Paste. *Antiseptics*—Thi-Cin, Zemet, Tincture Iodine U.S.P. *Dental Prophylaxis*—Pumice Paste. *Postoperative Chemotheraphy*—Sulfanilamide Sticks.

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

THIS TIME GET "HISTACOUNT"

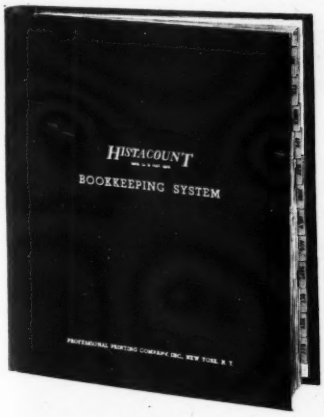
AND MELT AWAY
YOUR BOOKKEEPING TROUBLES
AND TAX WORRIES
LIKE SNOW IN SUMMER SUNSHINE

COMPARE BEFORE BUYING

Get "Histacount". Compare it with ANY other system for contents, accomplishments, practicability, appearance, durability, price, etc. When doctors do this it is a fact that 100 out of 100 choose "Histacount".

BOOKKEEPING TROUBLES TAX WORRIES

Banish bookkeeping drudgery; make it a pleasant task instead. Eliminate tax worries, last minute rushes, doubts and guesses and overpayments. Get complete daily, cumulative figures; know your income and expenses, all about taxes, depreciation, deductible items, financial and other reports. It takes only a few minutes a day with simple, easy, non-technical "Histacount" system. No bookkeeping knowledge whatsoever is needed. Saves time, money, worry. Meets all government requirements.



20 DAY FREE TRIAL OFFER

The *HISTACOUNT* bookkeeping system is sold with the guarantee that if, for any reason whatsoever, it is returned in good condition, within twenty days, the purchase price will be instantly refunded.

$6.75 COMPLETE

Professional Printing Company, Inc.
15 East 22nd Street, New York 10, N. Y.

Gentlemen:

Please send me the "Histacount Bookkeeping System" as per this trial offer. I want the ☐ Plastic Bound Style; the ☐ Loose Leaf Style.

☐ I enclose $6.75 ☐ Send it C.O.D.

DR. _____

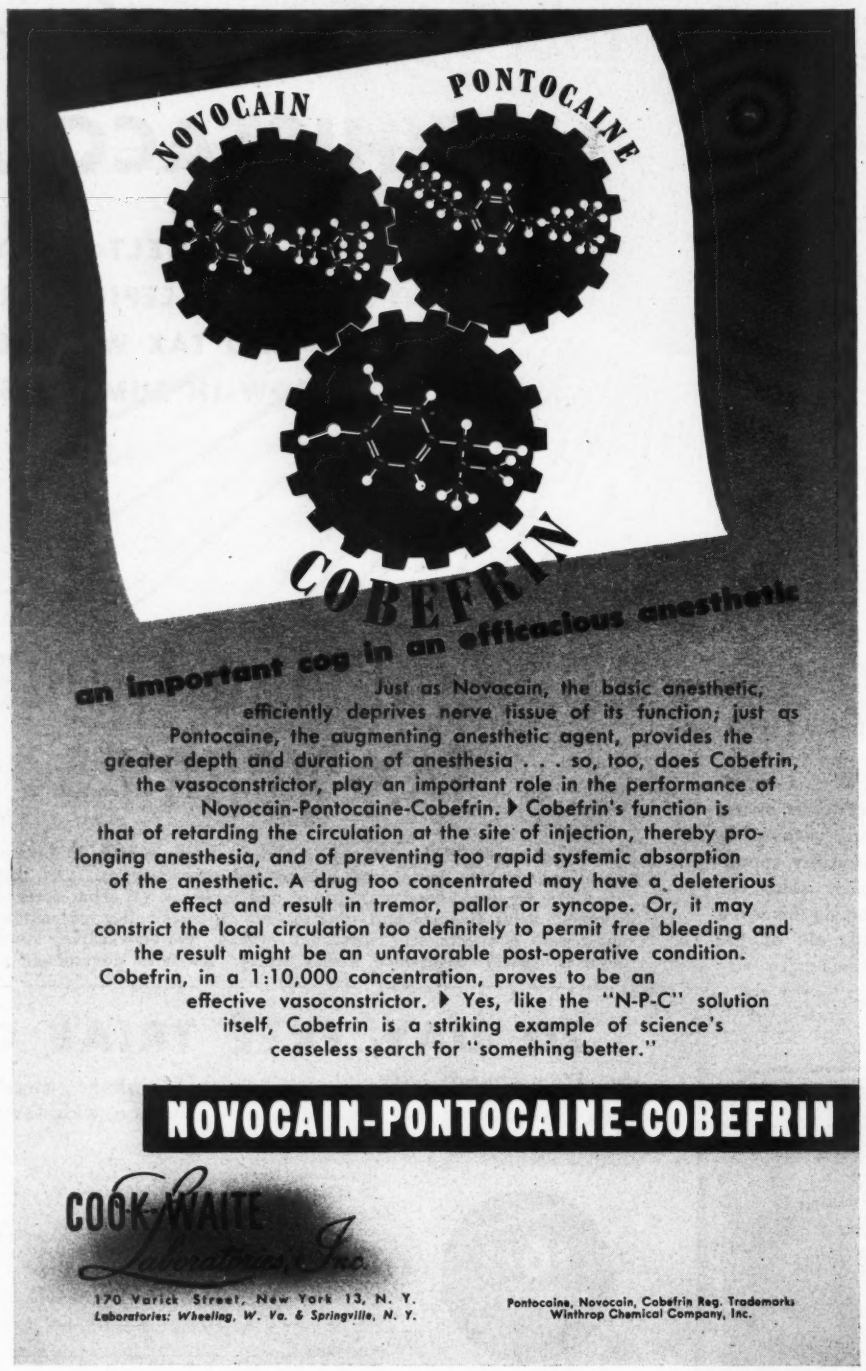
ADDRESS _____

CITY AND STATE _____

HISTACOUNT includes 365 daily pages, 12 monthly and one yearly summary sheets; social security and withholding tax forms; complete instructions; 400 pages in all! Extra-heavy, stiff, durable binding, gold stamped. Loose-leaf or plastic bound. Both priced at $6.75. Refills for loose-leaf style are $3.35 a year.

TRIAL COUPON

LET THE SUN SHINE ON YOUR RECORDS



an important cog in an efficacious anesthetic

Just as Novocain, the basic anesthetic, efficiently deprives nerve tissue of its function; just as Pontocaine, the augmenting anesthetic agent, provides the greater depth and duration of anesthesia . . . so, too, does Cobefrin, the vasoconstrictor, play an important role in the performance of Novocain-Pontocaine-Cobefrin. ▶ Cobefrin's function is that of retarding the circulation at the site of injection, thereby prolonging anesthesia, and of preventing too rapid systemic absorption of the anesthetic. A drug too concentrated may have a deleterious effect and result in tremor, pallor or syncope. Or, it may constrict the local circulation too definitely to permit free bleeding and the result might be an unfavorable post-operative condition. Cobefrin, in a 1:10,000 concentration, proves to be an effective vasoconstrictor. ▶ Yes, like the "N-P-C" solution itself, Cobefrin is a striking example of science's ceaseless search for "something better."

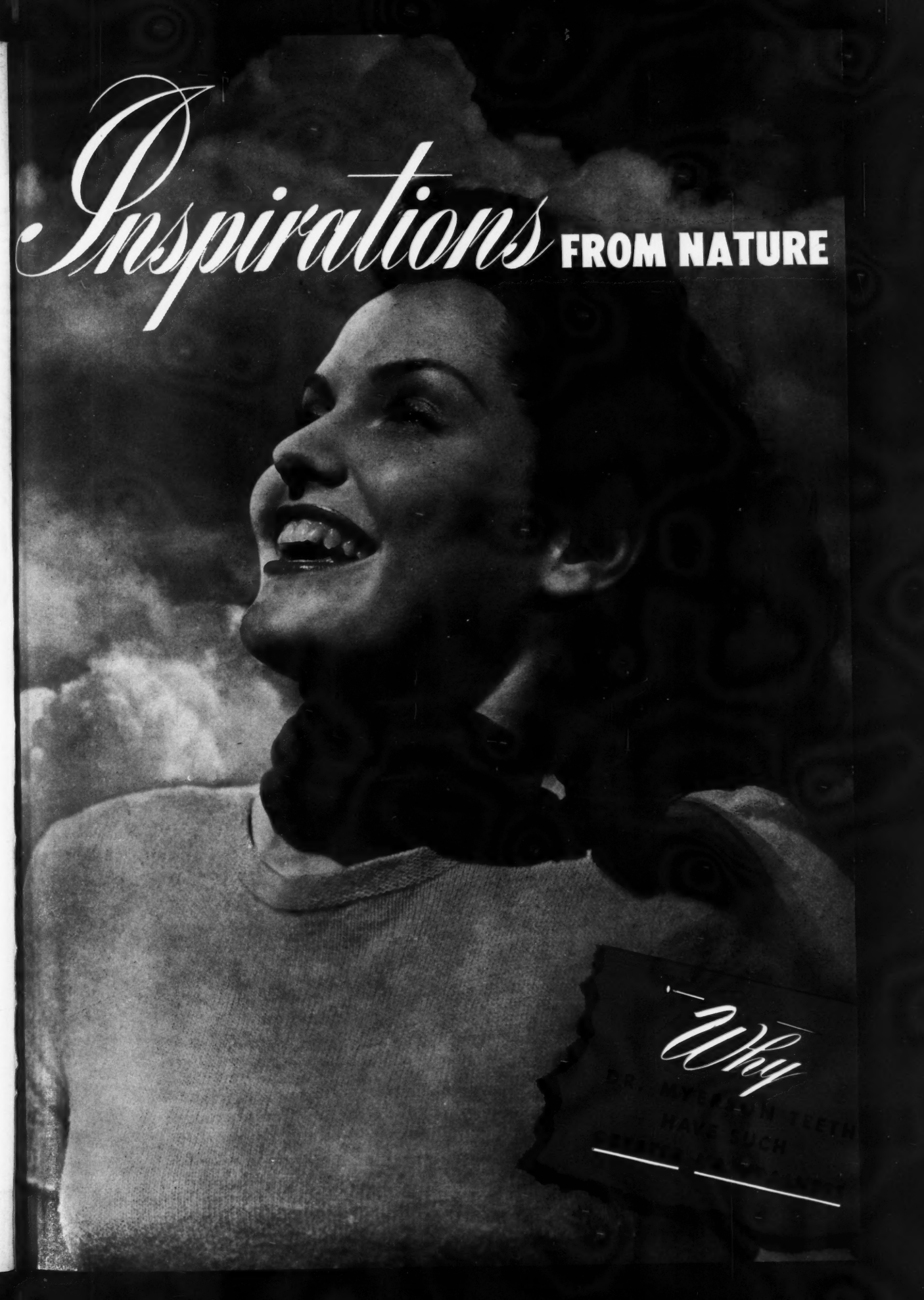
NOVOCAIN-PONTOCAINE-COBEFRIN

COOK-WAITE Laboratories, Inc.

170 Varick Street, New York 13, N. Y.
Laboratories: Wheeling, W. Va. & Springville, N. Y.

Pontocaine, Novocain, Cobefrin Reg. Trademarks
Winthrop Chemical Company, Inc.

Inspirations FROM NATURE



Greater Beauty

IDEAL TOOTH INCORPORAT

PROVEN STRENGTH

ARE COMBINED IN DR. MYERSON'S TEETH EVEN AS THEY ARE IN NATURE . . .

The play of light and shadow, the erosions of time have contributed to the rugged beauty of this seascape. It is a striking example of that law of esthetics, "Beauty and Harmony through Variety."

Similarly, the beauty of natural teeth is portrayed in Dr. Myerson True-Blend Teeth, in the harmony of color that avoids the sameness of *mechanically-made* articles.

In Dr. Myerson True-Blend teeth, the blending, striations, erosions, irregular incisal edges—are all hand-made—by skilled and careful hands.

Dr. Myerson's teeth are stronger, too . . . For greater security in processing or in use, Dr. Myerson True-Blend Teeth are always indicated.

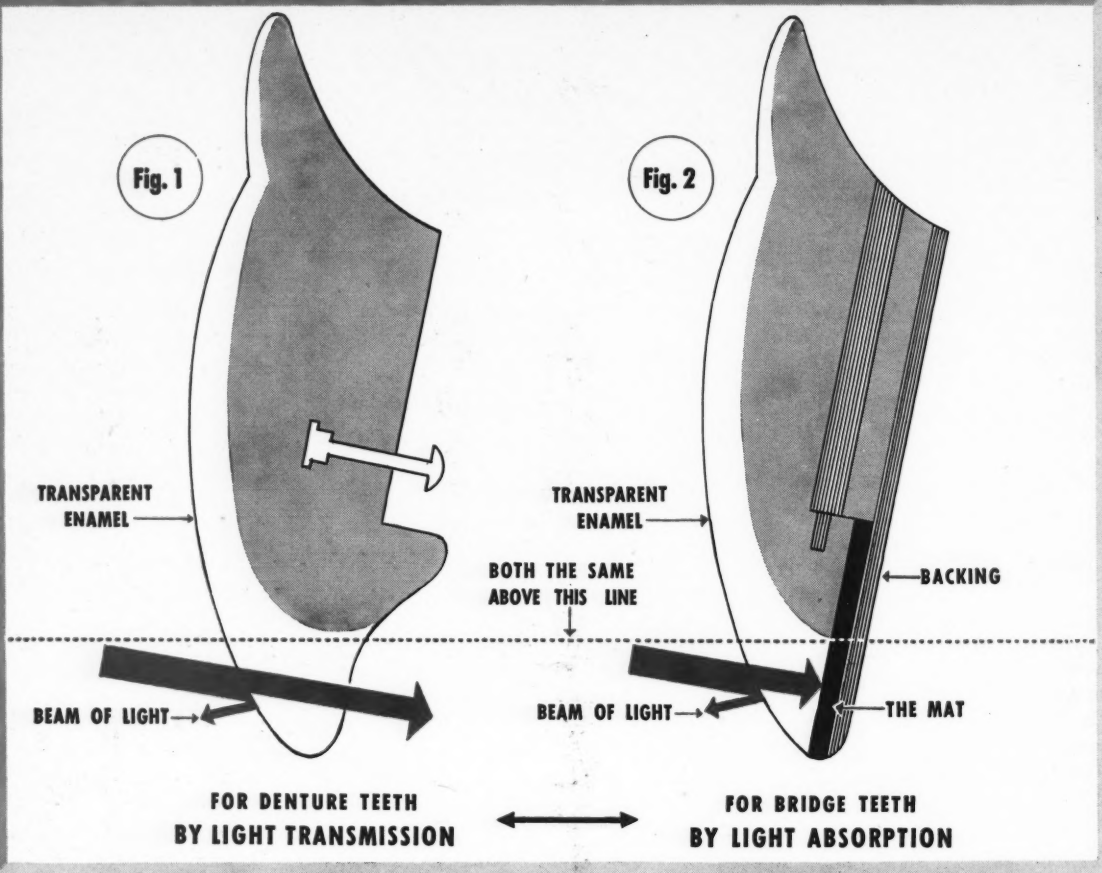
Dr. Myerson's

TRUE-BLEND *Anteriors*

and

TRUE-KUSP *Posteriors*

BRIDGE, MASSACHUSETTS



Dr. Myerson's

TRUE-BLEND FACINGS

Achieve Transparent Effects by Light Absorption

The transparent enamel which Dr. Myerson introduced into denture teeth (Fig. 1) eliminated almost completely the opaque teeth that only a few years ago made dentures so obvious.

Similar effects are achieved in Myerson's True-Blend Interchangeable Facings, but by a new means. Long experience indicates that interchangeable facings ought to be protected by their backings right down to the incisal edge. To prevent the backing or the cement from marring the beautiful effects of the transparent enamel, Dr. Myerson introduced the light absorbent mat in the True-Blend Facings (Fig. 2).

True-Blend Facings have transparent enamel and subtle simulations of line stains. They more nearly match natural teeth than other facings, and are strong, dependable and interchangeable.

Dr. Myerson's

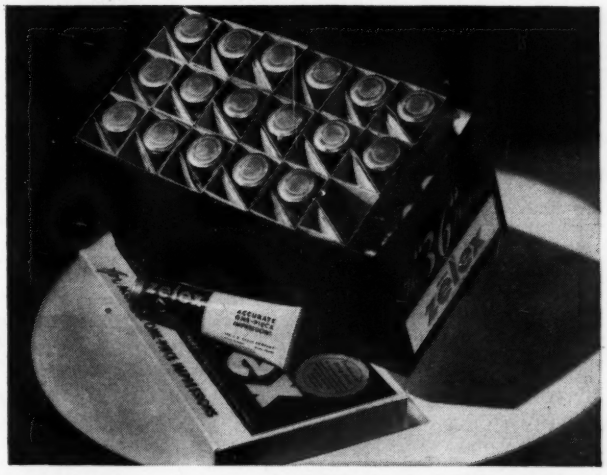
TRUE-BLEND ANTERIORS AND FACINGS

IDEAL TOOTH INCORPORATED, CAMBRIDGE 39, MASS.

Three Big Items of News from Caulk

the new and better ZELEX

Accurate, tough and elastic as always, ZELEX has been improved by war-born developments so it now assures you *positive control of manipulation.* Try this new ZELEX with its separately-wrapped control tablet. Get completely accurate one-piece impressions—without fracturing, crumbling or distortion—anytime, anywhere.



new "36" package

Inexpensive as the new ZELEX is, you save still more by buying it this way. You *pay* for 34 tubes . . . *get* 36 tubes . . . receive two extra tubes without extra charge. A handy water measure for ZELEX is included. *List price* **$11.25**

new Rim-Lock Impression Trays

In addition to the *"All-Sufficient"* set of six trays, designed for use with ZELEX or any other elastic impression material, this package contains a mahogany wall bracket. When attached to your wall, the bracket not only keeps the trays in plain view for easy selection, but protects them against falling and battering. *List price* **$10.00**

FOR MODERN MATERIALS CALL ON

Caulk

MILFORD, DELAWARE

See page 670 D.D.12

WILLIAMS GOLD REFINING CO.
BUFFALO 14, N. Y.

Please send information concerning Williams Golds.

Dr. .....

Address .....

City .....

See pages 672-73 D.D.12

VERNON-BENSHOFF CO.
P. O. BOX 1587, PITTSBURGH 30, PA.

Please send Vernonite information.

Dr. .....

Address .....

City .....

See pages 674-75 D.D.12

WERNET DENTAL MFG. CO., DEPT. 15M
190 BALDWIN AVE., JERSEY CITY 6, N. J.

Please send free supply of Wernet's Powder.

Dr. .....

Address .....

City .....

See page 676 D.D.12

CLARK-CLEVELAND, INC.
BINGHAMTON, N. Y.

Please send copy of "Denture Closeups."

Dr. .....

Address .....

City .....

See pages 704-713 D.D.12

COOK-WAITE LABORATORIES, INC.
170 VARICK ST., NEW YORK 13, N. Y.

Please send information concerning your products.

Dr. .....

Address .....

City .....

See page 706 D.D.12

COLUMBIA DENTOFORM CORP.
131 EAST 23RD ST., NEW YORK 10, N. Y.

Please send Design Charts and information mentioned in ad.

Dr. .....

Address .....

City .....

See page 706 D.D.12

THE MU-COL CO.
BUFFALO 3, N. Y.

Please send Mu-Col samples.

Dr. .....

Address .....

City .....

What is the secret of *Glareless Shadow-Reducing* light in the *Castle* "T-V"?

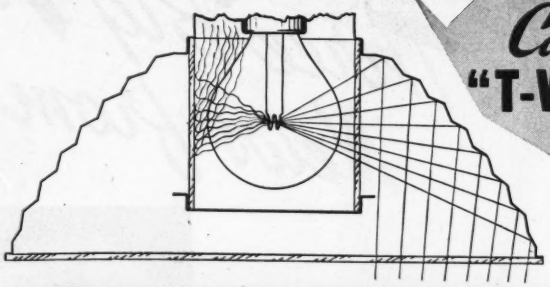
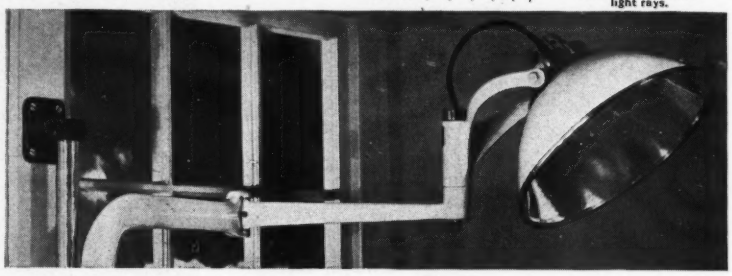


Diagram shows how light is reflected by some of the 28 steps in the Castle Reflector. Wavy lines show how filter blocks off heat rays and excess reddish and yellowish light rays.



There's no magic in Castle's famous *quality* of light . . . it's the result of an ingenious application of modern optical science. The 28-step reflector of the Castle "T-V" produces 56 beams of light which criss-cross and create a soft light dispersion that eliminates glare and highlights.

The shadow-reducing quality is due to the multiplicity of light cones created by the reflector sectors and to the large size of the reflector which gives a wide angle from which the light is reflected.

For further details of the Castle Tru-Vision Light, the ideal illumination for precision dentistry, write WILMOT CASTLE CO., 1123 University Ave., Rochester 7, N. Y.

Castle LIGHTS AND STERILIZERS

See page 708 D.D.12

THE HYGIENIC DENTAL RUBBER CO.

AKRON 8, OHIO.

Please send information concerning the Thermolator.

Dr. .....

Address .....

City .....

See page 714 D.D.12

AUSTENAL LABORATORIES, INC.

5932 WENTWORTH AVE., CHICAGO, ILL.

Please send name of nearest Vitallium laboratory.

Dr. .....

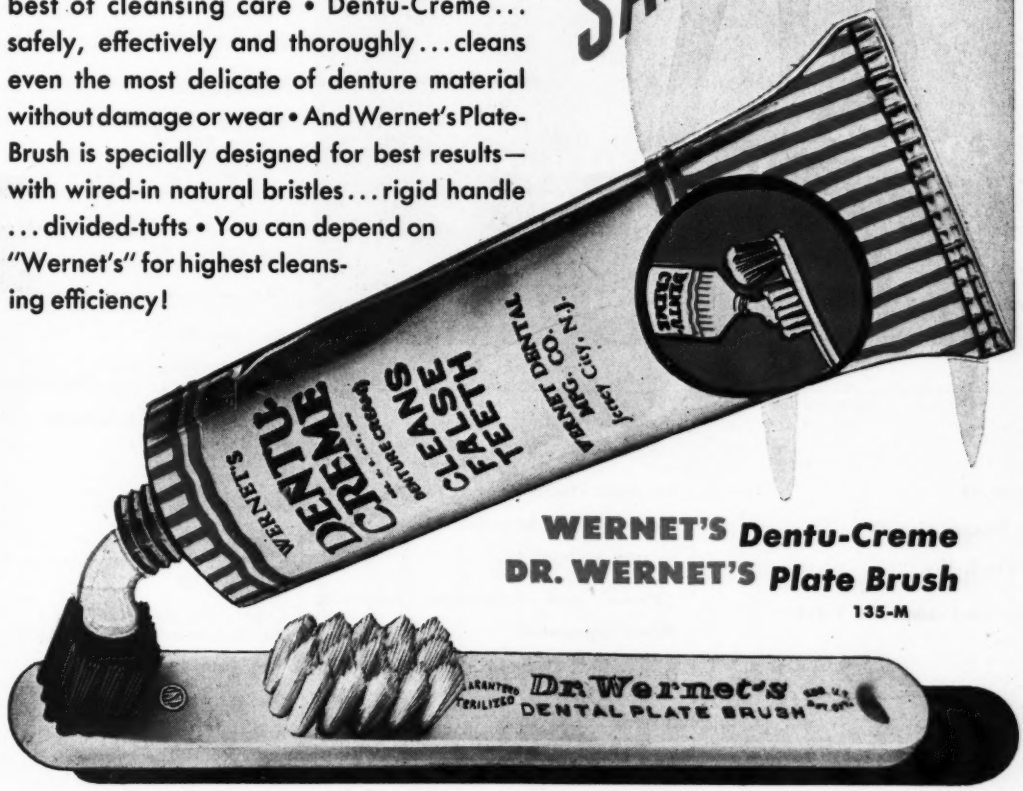
Address .....

City .....

WHO'D CLEAN A CAMERA LENS

with SANDPAPER?

Far-fetched? Indeed! But no more inexpedient than cleaning expensive, good-fitting dentures with any scouring powder or kitchen cleanser that happens to be handy! • If you are one of the many dentists who routinely recommend Wernet's Dentu-Creme and Dr. Wernet's Plate-Brush, you may rest assured that your patients' dentures are receiving the best of cleansing care • Dentu-Creme... safely, effectively and thoroughly... cleans even the most delicate of denture material without damage or wear • And Wernet's Plate-Brush is specially designed for best results—with wired-in natural bristles... rigid handle ... divided-tufts • You can depend on "Wernet's" for highest cleansing efficiency!



WERNET'S *Dentu-Creme*
DR. WERNET'S *Plate Brush*
135-M

Dr.
St.
City
State
Please send CO-RE-GA SAMPLES
and Booklets on "How to Wear Artificial Dentures"
This card for Dentists' use only
U.S.MAIL
CO-RE-GA
the perfect adhesive for dentures
Facsimile of the prepaid (sample request) card packed with each shipment of CO-RE-GA professional samples. Please use the card each time you order your regular supply of CO-RE-GA.
WILSON'S
CO-RE-GA
COREGA CHEMICAL COMPANY
208 St. Clair Ave., N.W. Cleveland 13, Ohio

See page 716 D.D.12

YOUNG DENTAL MFG. CO.
ST. LOUIS 8, MO.

Please send sample BS Polisher.

Dr. .....

Address .....

City .....

See pages 716-717 D.D.12

WEBER DENTAL MFG. CO.
CANTON 5, OHIO.

Please send information concerning Weber Equipment.

Dr. .....

Address .....

City .....

See page 717 D.D.12

P. N. CONDIT
BOX 204, BACK BAY, BOSTON 17, MASS.

Please send booklet.

Dr. .....

Address .....

City .....

See page 718 D.D.12

INTERSTATE DENTAL CO., INC.
220 WEST 42ND ST., NEW YORK 18, N. Y.

Please send information concerning Opotow.

Dr. .....

Address .....

City .....

See page 718 D.D.12

HARRY J. BOSWORTH CO.
1315 S. MICHIGAN AVE., CHICAGO, ILL.

Please send information concerning the Winglite.

Dr. .....

Address .....

City .....

See pages 722-23 D.D.12

J. F. JELENKO & CO., INC.
136 WEST 52ND ST., NEW YORK 19, N. Y.

Please send information concerning Jelenko Golds.

Dr. .....

Address .....

City .....

See page 723 D.D.12

MCKESSON APPLIANCE CO.
TOLEDO, OHIO.

Please send information concerning McKesson Nitrous Oxide Equipment.

Dr. .....

Address .....

City .....

See page 726 D.D.12

WILMOT CASTLE CO.
1123 UNIVERSITY AVE., ROCHESTER 7, N. Y.

Please send information concerning Castle Lights.

Dr. .....

Address .....

City .....

See page 728 D.D.12

COREGA CHEMICAL CO.
208 ST. CLAIR AVE., N.W., CLEVELAND 13, O.

Please send Corega samples.

Dr. .....

Address .....

City .....

WITH POLIDENT

THERE'S no easier way to clean dentures than by *soaking* them clean in POLIDENT. Nor is there any better way. For POLIDENT literally *dissolves* mucin, tarnish, food debris and odors...*soaks* them clean without the slightest danger of injury!

POLIDENT is recommended by thousands of dentists everywhere for safe denture-hygiene. *Safe* because it eliminates the handling required by brushing, and consequent danger of dropping. *Safe* because its *non-abrasive* action insures freedom from scratching or wear.

As an extra service to your denture patients, may we suggest that you recommend POLIDENT?

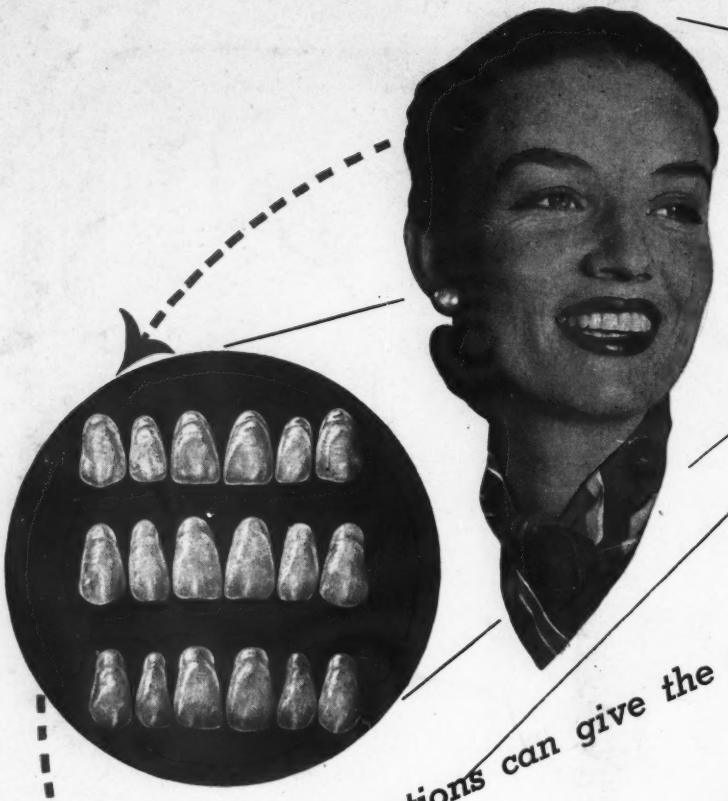
HUDSON PRODUCTS, INC., 190 BALDWIN AVE., JERSEY CITY 6, N. J.

SOAK
10 to 15 minutes in solution. (1 glass water to ½ tsp. POLIDENT).

RINSE
Hold under running water to rinse. That's all!

APPROVED
for use by leading manufacturers of acrylic denture materials.

POLIDENT
—to keep dentures fit!



TRUBYTE NEW HUE *restorations can give the effect of Living Teeth*

You have in TRUBYTE NEW HUE teeth all the elements necessary to create the effect of living teeth.
ADAPTABILITY to the subtle variations in color sensations produced by changing lights...
VARIETY OF FORMS and sizes to meet the most frequently seen forms in natural teeth...
NATURAL tooth contours for individualized positioning...

TRUBYTE NEW HUE teeth are distinctive from all other artificial teeth... they give to every restoration the effect of living teeth.

TRUBYTE NEW HUE

THE DENTISTS' SUPPLY COMPANY OF NEW YORK